

MARINE CORPS Gazette



AUGUST, 1946

30c



FLYING THE FLAK • STOP FIGHTING THE JAPS
DUTCH MARINES • THE M1 AS A TARGET RIFLE
PITY THE POOR PRIVATE • CASUALTY ASSISTANCE

THIS MONTH'S COVER

MARINE landing tactics have come a long way since the Caribbean maneuvers of the '20's and '30's, but this was where our present amphibious doctrine was developed. As a gentle reminder of the past and to illustrate this month's installment of LtGen Smith's *Amphibious Tactics*, SSgt John DeGrasse recreates the once familiar scene, complete with whaleboats, World War I helmets, Springfields, khaki, and leggins. This is Sgt DeGrasse's second appearance as a GAZETTE cover artist.

THE MARINE CORPS GAZETTE

Professional Magazine for the United States Marines
ORGAN OF THE MARINE CORPS ASSOCIATION
Offices: Marine Corps Schools, P. O. 106, Quantico, Va.
Telephone: Extension 4780

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VOLUME 30, NUMBER 8. Published monthly by the Marine Corps Association, Marine Corps Schools, P. O. 106, Quantico, Va. Copyright, 1946. Entered as second-class matter at the post office at Quantico, Va., under the act of March 3, 1879. Additional second class entry at Baltimore, Md. Single copy, 30 cents; subscription rate, \$3.00 a year. Subscriptions of all Marine personnel include membership in the Marine Corps Association. Articles, monographs, studies, and letters of professional interest are invited. Opinions expressed in the GAZETTE do not necessarily reflect the attitude of the Navy Department nor of Marine Corps Headquarters. Only service journals may reproduce Gazette material without special prior permission.



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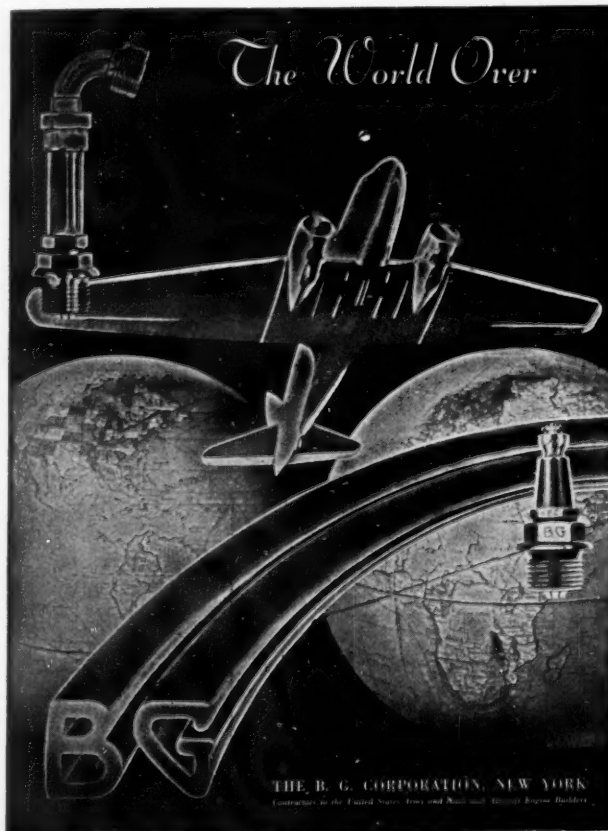
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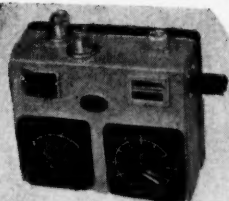


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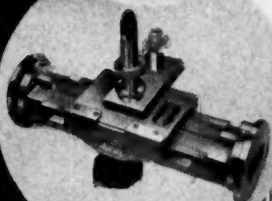


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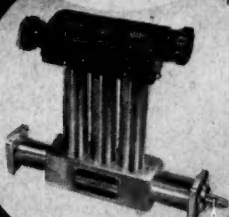




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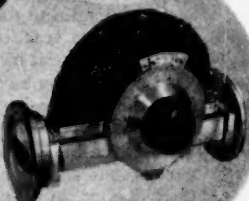
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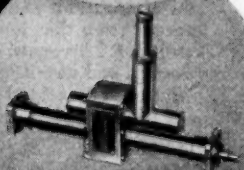
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—Captain E. R. Callaway, operating an RCA Loran receiver aboard the liner JOHN B. WATERMAN. Loran stations—set up as navigational aids for warships and military aircraft—are so located that they can now be used to serve many of the busy trade routes of the world (approx. 60,000,000 square-mile coverage).

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chart and finds or interpolates a corresponding "line of position" along which his ship or plane is located. By picking up signals from another pair of stations he is able to deduce a second "line of position." The intersection of the two indicates his position—accurate to within one per cent of the distance to the transmitting stations; the answer obtained in a fraction of the time required by celestial navigation methods.

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PASSING IN REVIEW

BOOKS OF INTEREST
TO MARINE READERS

Development of U. S. Sea Power . . .

HISTORY OF THE MODERN AMERICAN NAVY—Donald W. Mitchell. 477 pages, illustrated. New York: Alfred A. Knopf. \$4.50.

This is a well prepared and most interesting account of the development of the U. S. Navy from 1883 to and including Pearl Harbor on 7 December 1941. It is not only a story of development but also a full treatment of the struggles and disappointments of the service in maintaining itself, in obtaining appropriations, and the staving off of the retardation in progress introduced by various personalities over the course of the years. The sad postwar periods following the Spanish American War and World War I are clearly described and the reader will find himself thoroughly in agreement with the author in his inspiring search into the whys and wherefores of the stagnation that inevitably has faced our Navy when victory has been won and the tired but optimistic American people are content to sit back and rest and make no real attempt to forcefully prevent future wars.

The author includes much factual but interesting material on the performance of the Navy in diplomacy, in exploration, and in scientific enterprise. He concurs in the opinion of most historians that Mahan is the one man responsible for emphasizing the influence of sea power upon human events and states that Mahan was "possibly the most influential officer ever to wear the uniform of the American Navy."

Considerable space is devoted to the postwar period following World War I. The presidencies of Harding, Coolidge, and Hoover are collectively termed the "Naval Decline." During this era the role of the Navy in diplomacy is again stressed. Critical relations with Japan, naval activity in China, involvements in Nicaragua, and troubles in Haiti are all discussed in some detail. The Geneva and London conferences are taken up and their influence evaluated.

The volume described the Franklin D. Roosevelt impress upon the Navy as the "Roosevelt Naval Renaissance" and the author gleefully sets forth the results obtained by Mr Roosevelt, the most powerful naval exponent of all time, in forging a large and effective Navy. Dr Mitchell goes through this phase with evident pleasure since it is easy to see that he saw eye to eye with Mr Roosevelt in his ideas regarding naval expansion.

The author stresses time and time again that the United States has always been unprepared when actual war has come. His research has uncovered reasons for these dismaying facts and he has not spared the Navy itself. Incompetence and senility among ancient high ranking naval officers, the seniority promotion system, Adm Sims's opponents and Adm Sims himself, Secretary Daniels, Secretary Denby and others are indicted at one time or another for contributing in some measure to the faults that lay in the Navy itself and which directly influenced our state of unpreparedness.

The author wrote this book as a consuming task which first was begun in 1938 and completed in 1946. It is the culmination of a life-long interest in the U. S. Navy—at the age of twelve Dr Mitchell says "though I had never seen a battleship, I could have given from memory the tonnage, speed and armament of every major warship in the world." He then proceeded, with the "self-imposed task of reading everything that has been written concerning the United States Navy."

The reviewer feels that Dr Mitchell has made an outstanding contribution to history in general and to naval history in particular. He well deserves the Fellowship in History awarded to him by Alfred A. Knopf. I EMc

Counter Espionage . . .

WE CAUGHT SPIES—John Schwarzwald, 296 pages. New York: Duell, Sloan and Pearce. \$3.00.

Ever hear of the Army's CIC?

Probably not—they worked in secrecy even more shrouded than their sister organization, the vaunted OSS. As the author, John Schwarzwald, laments in his introduction, "The Office of Strategic Services (OSS) has had magazine articles and films published about its work but, in the field, CIC men often led their OSS counterparts around by a string to accustom them to the work they were expected to do."

The CIC was the Army's Counter Intelligence Corps; they specialized in the "art of catching spies," and Schwarzwald's book is one of the

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MARINE CORPS

Gazette

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PASSING IN REVIEW

Continued

most fascinating of the present "now-it-can-be-told" series.

Mr Schwarzwaldler enlisted in the Army in 1941 as a private. At the war's conclusion he was a major in charge of counter intelligence in northern Germany. The book is the relation of the professional adventures of himself and his associates as the American Army advanced from North Africa to Sicily, Italy, France and finally Germany. It is a rapid fire series of incidents and anecdotes, some sinister, some ludicrous, and some thought-provoking.

He sheds considerable light on the obscure politico-military maneuvering in North Africa, including three "true" stories explaining the mysterious assassination of the French Admiral Darlan.

There is also a delightfully candid account of the CIC's hiring of the professional murderers to eliminate the notorious Nazi *agent provocateur* Hans Richter.

In fact the whole book is written in a half-amused vein which might be expected of a brave and cynical man who is also a very capable writer and student of human nature.

One beautifully written chapter called "The Story of Angela" is comparable to a tale by DeMaupassant. It tells of a beautiful Italian girl of a high placed Fascist family who becomes a spy when her lover, a Nazi *leutnant*, is killed. How her own beauty betrays her gives the story an amazing twist.

Some of the book concerns a "Major Benson"—which is not his real name—a particularly fabulous American agent, who, according to Schwarzwaldler, stood "a full six feet three and a half and weighed well over two hundred pounds. His dome was as bald as a cue ball and his mustachios were the envy of every gendarme in France."

Benson had been born in Russia, left it during the revolution, lived in practically all the Slavic and Balkan countries, received a university education in Germany, established a business in France, grew tired of it and came to America where he married a beautiful wife. He spoke fluently every European language except Swedish and Finnish. With this background, his value to the CIC is understandable. His doings are fully as colorful as any fictional character created by the late E. Phillips Oppenheim.

The last chapters deal with the break-up of

Nazi Germany, highlighted by the CIC's clashes with the remnants of the Gestapo and the "not very strange" death of Heinrich Himmler.

More important books have and will be written about the European War, but few will be as readable and entertaining as *We Caught Spies*.

EHK

The Celebrated P-38 . . .

WALTHER PISTOLS—W. H. B. Smith, 94 pages, illustrated. Harrisburg: Military Service Publishing Company. \$2.00.

Since our troops in Europe discovered the pistol the Germans referred to as a P-38, there has developed an increasing interest and enthusiasm among users of firearms over this excellent handgun, classed by some as the most advanced design in existence.

While most Americans are nominally familiar with the older Luger and Mauser military pistols, fewer are aware of the great Walther plant (pronounced "val'ter", with the "a" sounded as in "father"), which developed this outstanding arm. For example, very few American shooters know that at the start of the war this sixty-year-old firm was the largest manufacturer of handguns in the world.

In this small book, Mr Smith goes briefly into the history and background of the Walther Arms Company, and its long line of excellent, pocket model, unlocked, automatic pistols, which culminated in the development of the double action automatic Polizei Pistole in 1929.

The double-action feature which permits an automatic pistol to be carried loaded and safe, with all springs relaxed, and yet fired by simply pulling the trigger, as in a revolver, was not completely original with the "PP" as it was called, but it was its first practical application, and placed the automatic at last definitely ahead of the revolver in general efficiency.

The large part of the remainder of the book is then devoted to the famous P-38 with its various modifications. This section is the only complete work on this subject and fulfills a definite need in view of the large numbers of these pistols now being marketed in this country.

These weapons are selling second hand at from fifty to one hundred fifty dollars, and vary in quality from perfect to dangerous. Anyone thinking of buying one should definitely obtain a copy of this book and study it before he parts with his money, since a pre-war or early wartime Walther is a beautiful and superior firearm of the most advanced sort, while a rush production

HISTORY OF THE MODERN AMERICAN NAVY

by Donald W. Mitchell

A highly readable, non-technical account of the modern American Navy from its beginnings in 1883 through Pearl Harbor. The clarity of writing style enlivens what ordinarily might have been a weighty strategic and tactical treatise. Illustrated with photographs, maps and charts.

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WE CAUGHT SPIES

by John Schwarzwald

This book is one of the most fascinating stories of the present "now it can be told" series. Written by a major in the Army's Counter Intelligence Corps, this is the account of counter espionage in North Africa and Europe.

173 A

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by W. H. B. Smith

An illustrated manual on the construction, advancement and history of the famous German Walther pistols and automatics. Detailed diagrams of the weapons and their main features go into making this book an authoritative report on these particular weapons.

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PASSING IN REVIEW

Continued

of the same model is usually just so much scrap iron.

The conclusion of the book covers briefly the subsequent Walther developments and the several .22 target pistols produced before the war. The entire work is liberally illustrated with both photographs and diagrams, and the technical sections are worded clearly enough for the layman to understand.

W. H. B. Smith is one of the foremost firearms technicians in America. He is perhaps most familiar to military men as the author of the well known *Basic Manual of Military Small Arms* which has become almost standard equipment in ordnance offices. Just recently his exhaustive *Pistols and Revolvers* has been published under the auspices of the N.R.A. He is at present completing the set of which *Walther Pistols* is the first member. Among the other volumes are *Mausers Pistols* and *Japanese Weapons*. JDC

The Official Story . . .

THE IWO JIMA OPERATION—Capt Clifford P. Morehouse, USMCR. 173 pages, including maps and appendices. Washington: Historical Division, HQMC.

Here are the cold, unadorned facts of Iwo Jima officially compiled for the Historical Division by Capt Clifford P. Morehouse, one-time associate editor of the GAZETTE. A slender, paper-bound volume, it is one of a series of monographs being prepared on important Marine Corps engagements in World War II.

Factual, rather than critical, the monograph is divided into two parts. Part I is a chronological, day by day, accounting of the Marines' progress across Iwo. Part II contains supplementary details; the planning phase, the role of the Navy, Army Air Forces, and supporting arms, the enemy's defense, and other pertinent information.

A foreword requests comment, criticism, and corrections from its readers, as it is expected that a revised version will be published at a later date. A limited number of copies are available upon request from the Historical Division. HQMC. EHK

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Among Our Authors



LT COL WILLIAM K. JONES can't see why our present infantry battalion T/O can't be effectively reshuffled into a training battalion, increasing its efficiency as a school in the military arts without decreasing its potential combat efficiency. To read how he works out this theory, turn to *Pity the Poor*

Private on page 29. LtCol Jones served with the 1st Bn, 6th Marines from September 1939 until July 1945. Not so long after Guadalcanal and before Tarawa he became battalion commander. Twenty-seven years old then, he was the youngest battalion commander in the Marine Corps, and at Saipan MajGen Thomas E. Watson, the 2nd Division's commanding general, characterized him as the best.

CAPT LEO B. SHINN thinks quite logically that now that the war with Japan is past history our training methods and problems should be modified accordingly. His ideas on the subject are set forth in *Stop Fighting the Japs* on page 23. Capt Shinn enlisted in the Marine Corps in August 1938

and received a field commission in November 1942. On the Kiska operation in August 1943 he was an observer and adviser with the 13th Canadian Brigade. He was a platoon leader with the V "Phib Corps" AmphsReconCo at Majuro and Eniwetok and had a company in the FMF AmphsReconBn in the Marianas and Ryukyus. At present he is an assistant G-2 with the Amphibious Training Command, Atlantic Fleet.





THE Dutch Marines **AND THE INDONESIAN PROBLEM**

With the end of the war in sight, the Japanese granted independence to the Dutch East Indies, fulfilling for the Indonesians a 37-year-old wish. To the Netherlands this represented an irreparable blow to Dutch economy, since most of Holland's wealth came from this incredibly fertile island group

Battle Honors of the Dutch Marines

THE NETHERLANDS Marine Corps has a 280-year record of which it is justifiably proud. Organized on 10 December 1665 by Dutch Adm Michael DeRuyter, the marines were first used as ships' detachments. They soon developed an amphibious character and were used as landing forces and infantry as well as gunnery personnel afloat. In many of the decisive naval battles waged by the Dutch, the marines have played major roles. Highlights in the Corps' history include the Four-Day and Two-Day sea battles against the British and the raid on Chatham, England, in 1666. Other years saw more action: in 1673, 2,200 marines engaged in the sea battle of Kykduin; in 1674, the battle against the French at Seneffe; in 1702, the Dutch-English expedition to Spain; in 1797, as the Batavian Republic under French domination, the battle of Kamperduin (Camperdown) was fought; 1816 saw the bombardment of Algeria; 1825-26, the Java War; 1847-57, battles with the pirates; in 1906-08 marines went on an expedition against Bali; and in 1929, they were sent to Curacao, Dutch West Indies, after the affair of Urbina.

By Capt Edwin Klein

Illustrated by Sgt Svend Andersen

FROM A SLIGHT distance, beyond earshot that is, the reinforced Marine regiment that sailed aboard the *NSS Noordam* from Norfolk on 18 November 1945 was indistinguishable from many another Marine unit that has sailed from the same famous port. The green dungarees were familiar, so were the M1s and other weapons in evidence. The big difference was that those marines were Dutch. Commanded by Col R. M. De Bruyne, RNM, and headed for the Indies, they were a trump card in Queen Wilhelmina's bid to retain a fabulously wealthy island empire.

The second echelon sailed from Norfolk on 11 December 1945 aboard the *NSS Bloemfontein*—a Dutch ship too, but one that is well-remembered by the thousands of American marines it transported overseas in the course of the Pacific War.

With the sailing of these two ships the U. S. training program for the Netherlands Marines had come to an end and a unique chapter in the history of the U. S. Marines was also con-

cluded, for this was the first time in the military history of this country that an entire service of a foreign power was completely reorganized and trained within our continental limits.

The original mission for this force, which was assembled and trained, first at Camp Lejeune and then at Camp Davis, N. C., was to assist the British and Americans in wresting the Netherlands East Indies from the entrenched Japanese invaders. With the war's sudden and successful close this plan became so much waste paper, and the life expectancy of a Dutch marine should have been considerably increased. Supposedly, the reoccupying force of Her Majesty's Government would be welcomed by the Indonesians after four years of domination by the Japanese. Such was not the case. While the Dutch were away, there had been some changes made. Some 90 per cent of the population was solidly opposed to the return of Dutch colonial rule; so much opposed in fact that they declared themselves a republic, formed an army armed with Jap equipment and bamboo spears,

SOME TIME ago the Gazette received a change of address card that said: "The above order covers a subscription to Marine Corps Gazette in favor of: Royal Netherlands Navy Headquarters, North Row, Marble Arch, London, W. 1, England. Kindly change this address and mail future copies to Commandant Korps Mariniers, Netherlands Navy Department, The Hague, Holland. . . ." We received this change of address with a great deal of satisfaction. It meant that the wartime step child of the U. S. Marine Corps was officially back in business at the old stand. It also made us wonder just what the Dutch marines have been doing since they left Camp Davis last fall, presumably for the Dutch East Indies. They had been trained and equipped by American marines; it wasn't too surprising to learn that they were doing a job in the Netherlands East Indies which in some aspects closely parallels our present venture in North China.

Metamorphosis of a Marine Corps

BEFORE THE WAR the Netherlands Marine Corps was a small, crack unit of less than 2,000 men performing traditional marine chores within the Dutch Navy. Their uniforms and customs were influenced by the British and their equipment and arms patterned the Germans.

Either an enlistment or a commission in the Dutch Marines was a career proposition. Promotions were slow. A man became a private, third class, one year after enlisting. The second year he became a private second class. Another year and he was a private, first class. Then after three to five years if he showed promise he would be sent to NCO school which led to corporal's stripes. After a total of eight or ten years service he might make sergeant. Sergeant major required 15 to 18 years service. Adjutant, a warrant administrative rank, and the highest grade then attainable by an enlisted man, could hardly be reached in less than 20 or 25 years.

The officers were graduates of the Royal Netherlands Naval Academy. Entrance requirements were tough, including three years of college and a knowledge of three languages other than Dutch. The three years at the Royal Academy included another language—Malay, the tongue of the Netherlands East Indies.

After two years as a second lieutenant, the new officer was eligible for promotion to first lieutenant. Captain required a minimum of ten years service. There was no rank of major and appointments to lieutenant colonel or colonel were rare.

In 1940 the Germans virtually annihilated the European component of the Corps and in the early months of 1942 the Japanese crushed the colonial units. The Dutch Marines were apparently through.

In the fall of 1942 the Navy Department of the Netherlands government-in-exile started reorganizing these shattered remnants. Influenced by American Marine victories at Guadalcanal, they petitioned for American help.

In the summer of 1943 a few Dutch Marine officers attended Marine Corps Schools, Quantico. In the fall more offi-

cers arrived along with several hundred enlisted men gathered from the far corners of the world. These men were to be the cadre of the new Netherlands Marine Corps. They attended service schools at Quantico, Camp Lejeune, and Camp Pendleton.* The plan was that after the invasion of Europe this skeleton force would be brought to fighting strength by recruits from liberated Holland.

The first phase of the plan worked. By January 1945 a full-fledged training program under Col M. R. DeBruyne, RNM, and LtCol L. Langevelt, RNM, was under way at Camp Lejeune. BrigGen Alfred H. Noble, USMC, supervised the program.

Gone were the old fashioned high colored blues and European weapons of the prewar Corps. Now they wore marine greens and khaki, distinguished from the U. S. Marines only by a red shoulder blaze. And they were armed with standard American infantry arms.

Dutch speaking Marine instructors and Navy corpsmen were assigned. After their recruit period, paralleling the Parris Island "boot" training, the Netherlands were sent on to specialists' schools or to a 12-week advanced combat training program.

In August 1945 the unit was shifted to Camp Davis which had been acquired from the Army, but by now the war was over.

The future of the Netherlands Marine Corps is incorporated in the present 10-year rebuilding program of the Dutch Navy which is designed to give the Netherlands a small but efficiently modern fleet plus an adequate amphibious force. Last fall and winter two recruit classes of 1,200 men each began their training to supplement the force now in the field. The Royal Netherlands Naval Academy has been re-established at Den Helder and a special course for Marine officers, featuring American methods and taught by U. S. Marine trained officers, began this May.

*For a Dutch officer's reaction to U. S. Marine schools and training see Maj E. J. Baron Lewé van Aduard's *The Determined Amphibian* in the February '46 issue of the GAZETTE.



Flames sweep through a building in the Javanese town of Bekasi as British soldiers retaliate for the massacre of some of their men by Indonesians.

and said, "We don't want you back under any terms. We want complete independence."

Immediate compliance with this proposal would have had the same effect on the Netherlands political and economic structure, battered as it is from the war, as amputating the body at the neck and expecting the head to survive. For it is through the exploitation of its South Sea Island empire that the Netherlands—12,704 square miles of Northern European coast, less than nine million people, and virtually no natural resources—has remained one of the world's leading mercantile nations for over 300 years.

To American marines, whose illusions concerning the splendor of the South Seas were rather rudely shattered by stop overs in the Solomons, Gilberts, Marshalls, and Marianas, the size and wealth of the Netherlands East Indies are hard to visualize.

First, it is big. It is the largest as well as the most important island empire in the world. It includes thousands of big and little islands totaling nearly 750,000 square miles—that's one-quarter the size of continental United States and they are scattered over approximately the same area.

The population is estimated to exceed 75 million which is larger than any national group

in Europe with the exception of the Russians, and among the Asiatics is almost on a par with the Japanese.

Officially, the population is divided into three categories: natives, Europeans, and Orientals. The "Europeans," who number 250,000, include not only the full whites but also the mixed-blood Eurasians—or Indos as they are colloquially called. The Orientals—chiefly Chinese—number nearly 700,000.

Top of the pile before the war were the "imported" Europeans, occupying most of the important government and business positions and regarding the Indies as a place where a fortune could be made so that they could return eventually to Holland. Numerically small, this group was the class most affected by the Japanese occupation. Four-fifths of the "Europeans" are Indos who regard the Indies as their permanent home although a certain percentage drift to Europe.

Most of the wealth of the Indies is based on the almost incredible fertility of the soil. Three crops a year is the rule for most products. Before the war the Indies produced 90 per cent of the world's quinine, 85 per cent of the pepper (long a Dutch monopoly), 82 per cent of the kapok, 33 per cent of the rubber, 30 per cent of

the coconut, 17 per cent of the tea, and important percentages of fibres, palm oil products, tobacco, sugar, coffee, cocoa, and teakwood. Vast deposits of tin and oil were just beginning to be exploited and there were huge reserves of high quality iron ore that had not as yet been touched.

But in spite of this wealth and the economic benefits of Dutch rule, the broad base of the population, the Indonesians, have not materially benefited because any possible rise in the standard of living has been absorbed by the zooming population which has increased over 1,000 per cent in the last 125 years.

When the war ended in August the Dutch were in no position to send a force to the Netherlands East Indies. The British were. From the Southeast Asia Command a task force was dispatched consisting of two divisions, one British and one Indian, plus air and sea support.

Their operations order paraphrased that of the III Amphibious Corps in North China. They too were a friendly force landed at the request of an Ally. The British program—similar to that of the American mission in China—had three points. First, they were to disarm and repatriate the Japanese and dismantle the puppet government. Second, they were to rescue and evacuate Allied POW's. Third, they meant to restore civil authority and maintain order. The difficulties surrounding the third point of the program made the successful completion of the first two points impossible.

For instead of the expected minor clashes with a few diehard Japanese groups and perhaps a little rioting by radical Indonesians, the British walked right into a well-organized rebellion.

In August, with the end of the war in sight, the Japanese had hurriedly recognized the independence of the Indonesian Republic, a culmination of a Nationalist movement that had begun in 1908. Not only did they recognize the Republic, but they also assisted the Nationalists in the formation of an army of 100,000 partially equipped with Jap small arms, artillery, and—one source at least reports—62 aircraft. One of the first acts of the new government was to declare war against the Dutch, Eurasians, and Ambionese—the last are warlike Ambionia Islanders from the Malay archipelago who make up a sizable percentage of the Dutch colonial army.

Leader of the Nationalists and president of the new republic was Dr Achmed Soekarno. Denounced as a Jap collaborator by the Dutch, Soekarno blandly admitted receiving arms from the Japanese, but maintained his position is anti-Japanese just as it is opposed to domination of Indonesia by any foreign or outside power. According to him, it is more than a fight for political autonomy—it is a holy war; Mohammedans against the Dutch "infidels."

The British did not promise to re-win the Indies for the Dutch. The best they could hope to do was to secure certain vital areas which would give the Dutch a political beachhead from which to negotiate.

Most of these objectives are on the island of Java, which is also the epicenter of the revolt. Unquestionably, Java dominates the Indies. With one-fourteenth the total land area—it is about the size of Alabama—it contains two-thirds of the total population. Present estimates are that there are 52,000,000 Javanese—a population density of 1,000 per square mile which is higher than any other area of comparable size in the world. Although not a warlike people, the Javanese have revolted against the Dutch 70 times in the last 300 years.

The four most important cities, economically as well as strategically, are Batavia, Surabaya, Semarang, and Bandoeng. These the British quickly occupied. Batavia with its half-million people is the capital. Surabaya is nearly as large and Semarang and Bandoeng each have a population in the vicinity of 200,000.

The British did not extend these beachheads nor were they in sufficient force to do so. In fact, they were compelled to ask the still-armed Japanese to police the outlying districts. There have been no full-scale battles between the British and the Indonesians, actions being limited to terrorist and guerrilla tactics on the part of the rebels and patrolling and retaliatory raids by the British. In some clashes the Indonesians have used Jap 75's and the British have used planes, including American-built Thunderbolts, in strafing. This last brought a protest from some liberals in the U. S. who questioned the use of lend-lease equipment for such purposes.

To help ease the political situation the British have named as special envoy, Lord Inverchapel, the former Sir Archibald Clark-Kerr, who straddles the fence rather neatly by saying that the natives "really want the Dutch to stay" and that their premier is "wise, cool, and reasonable." But the British, understandably, are not willing to police the Indies indefinitely.

The Dutch Acting Governor, General Hubertus J. Van Mook, has admitted that nationalism has come to stay and that a few Dutch or British divisions cannot stop it.

In 1942 Queen Wilhelmina from her government-in-exile at London promised Indonesia self-rule in a commonwealth status. This promise has been renewed along with the proposal that the final decision, as to complete independence, be settled later. President Soekarno, having made his stand for immediate and unequivocal independence, opened the way for more amiable negotiations by yielding the political stage to Premier Sutan Sjahrir, leader of the Indonesian moderates.



Three Netherlands Marines, undergoing intensive combat training, find the going difficult as they plow through an obstacle course at Camp Lejeune.

On 30 March Dutch-Indonesian negotiations were shifted from Batavia to The Hague. Premier Sjahrir named a commission of three cabinet members to accompany Dr. Van Mook and Lord Inverchapel to the Netherlands capital, so a way to an amicable settlement is open, perhaps along the lines of the American program in the Philippines.

In the fall of last year the only forces available to the Dutch in the South Pacific was a small naval squadron of two cruisers, four submarines, and a destroyer, plus a few thousand colonial troops. The gradual replacement of the British by Dutch troops began the first of the year.

The first contingent of marines, having sailed from Norfolk on 18 November, arrived at Batavia after a 56 day cruise during which they had crossed the Atlantic, passed through the Mediterranean to the Suez Canal, and laid over for a time at Ceylon and Penang Island, Malaya.

One battalion of marines was landed. Indonesian tempers flared. At British request—the Dutch forces were under the control of the Southeast Asia Command—the *Noordam* returned to Singapore with 1,000 troops still aboard. The second half of the regiment—or as they were beginning to call it, the Marine Brigade—arrived at Singapore aboard the *Bloemfontein* and was disembarked.

The brigade bivouacked at an abandoned Dunlop rubber plantation nine miles from Singapore, a camp previously occupied by the Japanese.

After following out the British policy of occu-

pying the outer islands where enthusiasm for the new republic was at best only lukewarm, the Dutch began landing their main force, about 10,000 men, on Java on 9 March. The Dutch went ashore at Batavia, Semarang, Surabaya, and later, Bandoeng—the four key cities held by the British. The Marine Brigade made up half the landing force, the remainder being light infantry battalions trained and equipped by the British. These troops plus the marine battalion and colonial troops already engaged brought the total available Dutch strength on Java up to about 14,000.

By the end of March, Dutch troop totals were up to 20,000 with the following reserves available: 6,000 trained Dutch troops and 7,000 partially trained natives in Malaya, and about 11,000 troops committed on islands other than Java. Although there had been outbreaks on Sumatra, Bali, and Lombok, the outer islands remained relatively quiescent. The British felt that the Dutch were now present in sufficient strength to hold their own and the evacuation of British and Indian troops was begun.

The mission of the Dutch marines in the Indies is more than a police function. They are important pawns in a game that may win or lose an economic empire—the term “economic” is used advisedly for the future political independence of the Netherlands East Indies is virtually assured. But with their past traditions and present training, they are well-equipped to sustain their motto, “Je Maintiendrai”—“I shall maintain.”

END



A Marine Corsair cuts loose eight five-inch rockets—comparable to a full broadside from a destroyer—at a Japanese hillside position on Okinawa.

FLYING the FLAK

Japanese AA fire was good but changing tactics and evasive action kept Flying Leatherneck losses to a minimum

By Capt Hubard Kuokka

HAILSTORMS are dangerous to aviators—especially hailstorms of steel.

Marine aviators had to make their bombing, rocket, and strafing dives head-on into veritable hails of steel from the very anti-aircraft batteries they were trying to knock out. Yet, the Leathernecks' evasive tactics and fast breaking trick offenses were so good that less than .4 per cent of them were shot down, according to Navy and Marine intelligence records.

In a total of 117,814 combat sorties flown against the Japanese during the entire war, only 437 Marine planes were lost to AAA, and during the last year when 24,313 individual strikes were flown, 183 planes were shot down (not quite one per cent) and 795 were damaged (3.25 per cent).

In the entire war 523 Marine flyers were killed in action, 34 were still missing in action as of 31 May 1946 and 312 were wounded in action. These casualties were due both to enemy AAA and aircraft.

Our air superiority during the war kept the possibility of being shot down by a Jap aircraft at a minimum.

What was left of the meager Japanese aircraft opposition rose in a swarm to battle our fighters over the Japan-Okinawa-Ryukyu area, and the Marine pilots shot down 737 of them, bringing their war total to 2,371 Japanese planes destroyed.

Only one Marine plane was knocked down by the desperate Japanese fighters for every eight shot down by antiaircraft fire. The ack-ack was the big problem to solve, and sometimes there was no solution.

The Marines' deadliest antiaircraft opposition was encountered by the newly-formed Corsair squadrons aboard five of the Navy's fast carriers and four CVE's during the first six months of 1945, when strikes into the inner ring of Japan's defenses and even against Tokyo itself became a daily occurrence.

These Marine carrier squadrons in the Japan area were trained primarily in softening up enemy defenses for amphibious landings and in supporting Marine infantry units ashore.

Starting with strikes against Formosa in January, 1945, these flattop fighters off the *Essex*, *Wasp*, *Bennington*, and *Bunker Hill* soon got into the big time when they struck Tokyo on 16 and 17 February.

Then they covered the Marine landing on Iwo Jima, struck Tokyo again on 25 February, plastered other targets in the Ryukyus, helped soften up Okinawa and continued support of the ground forces there.

It was in this area that the brand new *Franklin*, which had just arrived with its Marine fighters for action, was set afire by a Judy in March and the *Bunker Hill* was kamikaze'd in May.

IN 218 sorties against the Tokyo area in February, the Marines, coordinating with navy carrier-borne aircraft, made rocket, strafing, and bombing runs virtually down the flaming gun barrels of Japan's heaviest array of antiaircraft artillery and lost 9 Corsairs (4 per cent) and suffered damage to 10 (almost 5 per cent).

In April the fast carrier squadrons were joined by Marines flying off the escort carriers *Block Island*, *Gilbert Islands*, *Cape Gloucester*, and *Vella Gulf*. Additional fighter and torpedo bomber squadrons on the *Salerno Bay* and the *Puget Sound* were on their way when the war ended.

From January to July 1945 all the carrier Marines made 3,735 sorties against antiaircraft opposition and lost 51 planes (1.4 per cent).

A Jap's version of the duel in the Munda area in 1943 was given by a Japanese gunnery officer, LtComdr S. Yunoki, IJN, in an interrogation after the war.

"We think we shot down about 300 planes during the five months' period beginning February," he estimated. "But the dive bombers and torpedo bombers made very serious attacks. Food and ammunition dumps were constantly destroyed. Runways were badly damaged by raids but were usually fixed again within 48 hours."

He also told of the attacks on shipping.

"In May 1943, the destroyer *Kagero* was sunk by mines between Kolombangara and Gizo. The destroyers *Kuroshio* and *Oyashio* went to help it, but dive bombers came out of a rain squall and sank them at the same time. They didn't expect dive bombers in such heavy rain. The *Michishio* (DD) was badly damaged in the same attack."

He considered machine guns more effective against our dive bombers than the 75, 40, or 25 mm AA guns which the Japanese had at Munda.

Intelligence was able to determine the calibre of the lethal Japanese antiaircraft fire for only 70 per cent of the Marine planes lost, but of those known cases, 60 per cent of the knock-

downs was found to be due to medium calibre ack-ack.

This was mainly impact-fuzed 20 and 25 mm HE fire, effective from 2,000 to 4,000 feet, and 40 mm projectiles effective from 4,000 to 6,000 feet. The Nipponese heavy AAA, varying from 75 mm to 120 and 127 mm, accounted for very few Marine planes.

The greatest number of total hits not necessarily resulting in loss was from light automatic fire, which became effective under the 1,500 foot level. Furthermore, excluding planes lost, about 70 per cent of the damage to low flying fighters and divebombers came from these light 6.5 mm, 7.7 mm, 12.7 mm and 13.2 mm Japanese automatic weapons. In the case of torpedo bombers, 64 per cent of the damage came from the light calibre guns.

A hit by an impact-fuzed medium calibre round was considered six times as serious as by a light calibre projectile which did not have sufficient energy or force to do much damage unless it hit a vital part. It was considered three times as serious as a hit by heavy calibre AAA, which was usually a hit by a low flying fragment from time-fuzed explosions some distance from the plane.

Furthermore, the medium calibre projectiles did not have tracers. Consequently, the attackers flew into a stream of steel without realizing it.

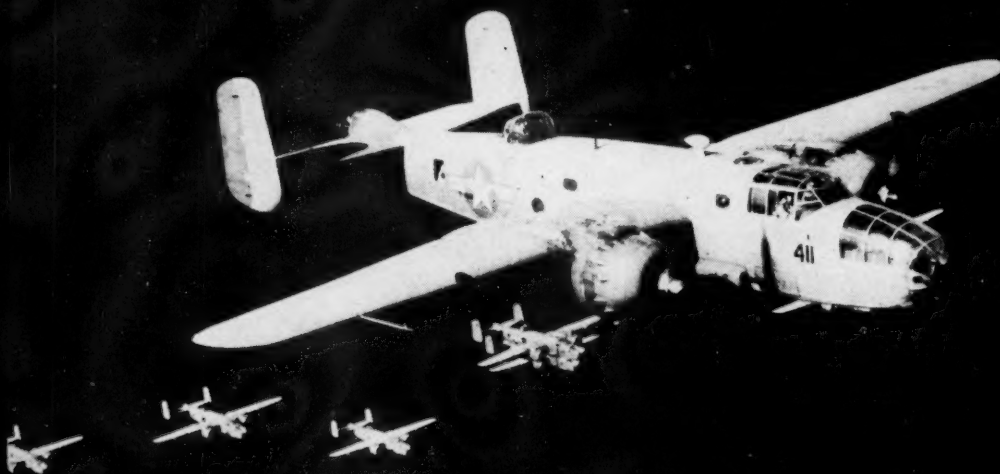
The greatest number of total hits from all calibres of AAA was suffered by the torpedo bombers which were used in vulnerable glide bombing and low level attacks, and also by the fighters which usually pulled out extremely low in their strafing and rocket attacks.

Twin-engine PBJ's (Mitchell bombers) made 2,132 sorties during the last year of the war, mostly fast, skip bombing, strafing, or rocket attacks at low altitudes against shipping and military installations—often at night by radar.

MORE of these PBJ's were shot down by small calibre AAA because the smaller automatic weapons were more easily directed against the sudden attacks, but these losses totaled only .6 per cent of the sorties flown. Total aircraft hit were 77, (3.61 per cent).

Japanese naval AA gunnery was more deadly to Marine and Navy pilots than Japanese army AA. This was because of the concentrated and highly mechanized setup of modern naval vessels.

In its army Japan started the war far behind the rest of the powers in antiaircraft development. Her first AA regiment is said to have been formed in 1935, and central fire directors were not encountered by our flyers until the end of 1943. Furthermore, the little aircraft



Fast flying North American Mitchell bombers (PB-1's) were used for low level work.

opposition met by the Japanese in their war against China gave them practically no experience and practice in AA work.

The last year of the war found the enemy's shore based AA much more effective, however. By this time the Japanese had radar controlled guns and searchlights, fire directors, and a tremendous amount of experience, having been on the receiving end of raid after raid.

MAJ ELMER G. GLIDDEN who flew a dive bomber in VMSB-231 in the Guadalcanal campaign and was later commanding officer of the same squadron in the Marshalls noted the Jap's improvement in accuracy in areas where they had been dug in for a longer period of time.

"The enemy AAA fire did not as a rule have a serious lethal effect, but more than one-third of our planes were hit on each mission, exclusively by the light and medium anti-aircraft fire," he said. "We picked up a few rifle slugs, too."

The Major, who was called the "Iron Man" because he flew more than 104 combat dives against the Japanese, said that the Japs' accuracy improved when the Marines had to use the same diving pattern in order to expedite their getaway.

For this reason Maj Bruce Prosser, who also blitzed the Japanese at Guadalcanal, preferred to initiate an attack on a well-defended ship than on ground terrain with the same amount of defense.

"Against a ship you can choose your own direction of attack, and the ship's guns do not have as wide an angle of fire," Maj Prosser said. "Attacking terrain targets is often channelized by mountain ranges, surrounding defensive

areas, streams, enemy installations and getaway routes. With a ship we could work around the cone from all directions."

Shore based or ship based, the accuracy of the Japanese anti-aircraft continued to improve until a report from the carrier *Hornet's* Navy squadrons said, "Unless the AA is dealt with, bombing accuracy cannot be expected to improve."

A similar story was reported by Maj Herman Hansen, Jr., commanding officer of VMF (CV) 112 and Maj T. E. Mobley, Jr., commanding VMF (CV) 123, both of which squadrons flew off the fast carrier *USS Bennington* against Japan from January until June 1945.

"Some of the heaviest ack-ack was experienced in attacks on island bastions such as Kakai, Amami O Shima, Miyako Shima and Ishigaki in the Nansei Shoto chain," they wrote in their combined war diary for April 1945. "The Japanese gunners were exceedingly accurate in their fire."

But they credited the Japanese fleet with the most dangerous volume of fire. "Probably the heaviest concentration of AA fire was experienced in the April 7 attacks against the Jap fleet units off Southwest Kyushu," they recorded.

THIS was the attack in which the battleship *Yamato* was sunk. During the strike, however, "The *Yamato* utilized her main battery for anti-aircraft fire and shot at our formation on its retirement for approximately 10 miles," the report said.

The crescendo of flaming guns and flying steel in the Tokyo area rose to such a volume that the attacking pilots had no alternative than



Douglas Dauntless dive bombers (SBD's) enroute to Rabaul and a warm reception.

to smash through, flak or no flak. The targets had to be hit, and hit hard.

"Our fighter aircraft have little hope of protecting themselves against the varied type of Japanese automatic AA fire," Maj Hansen and Maj Mobley said.

At first the Japanese were not too effective in shooting at unseen targets by radar. Marine pilots exploited this by using cloud cover to approach their objective and bearing down upon the Nips out of the sun.

They did not attempt high altitude horizontal bombing which requires a steady run over the target. Thus with a fast approach, using evasive action, they were able to avoid heavy AA tracking fire.

The Japanese made greater efforts to predict the marines' target and their direction of attack, and set up barrage fires, particularly at the attacker's pushover point.

The enemy cut all his fuses to burst at the same altitude. This mass of gray puffs made a terrifying screen of flying fragments for the Leathernecks to dive through. In fact, the Nipponese employed two or three layers of heavy barrage, extending from the attackers' pushover point down to 3,000 or 4,000 foot altitudes.

"It was certainly disconcerting to have to fly through those puffs of heavy ack-ack," said Maj William E. Abblitt, who led VMSB-231 in 55 neutralization raids in the Marshalls in the spring of 1944. "But it wasn't as deadly as the invisible medium calibre stuff we flew through time after time."

Pilots had to overcome the harmful psychological effect of AA before they could do any

accurate bombing, stated Col R. C. Mangrum of Seattle, who commanded dive bomber squadron VMSB-232 in the Guadalcanal area, when the Marines fought for Henderson Field in the summer of 1942.

"If a pilot expected to hit his target, he had to go in and hit it and forget about AA," Col Mangrum declared. "Once committed to an attack, there was little which he could have done to avoid AA except to offer a small prayer."

"Pre-flight briefing was the important thing in planning those strikes," Col Mangrum continued. "The enemy's defensive situation had to be studied in advance. We had to spot the enemy's cones of fire and to plan our attacks to avoid those lethal cones—if we could without weakening the effectiveness of our strikes."

Smart planning, aggressive attack, and quick get-away—those were the important factors in keeping down losses and building pilot morale, he summarized.

During the summer of 1944 Naval and Marine intelligence officers initiated an intensive study of Japanese antiaircraft tactics, and flak intelligence officers were trained and sent as advisors to combat aviation units.

Flak computers were invented to analyze enemy defenses on land for weak spots. The computer was used to determine the direction of the proposed strike and to specify the angle of dive, speed, release altitude, altitude of retirement, and speed of retirement.

Later, by developing the coordinated attack, they confused the Japanese gunners by filling the

Continued on page 47

Carbine or Pistol?

—Why Not Both

In closing with the enemy, the marine loses the advantage of fire power. He should have another weapon for close in work

By Maj Brooke Nihart

AN ARTICLE in the February issue of the GAZETTE posed the question, "Carbine or Pistol?", and left it unanswered. This article offers as an answer a non-school solution, "Why not both?" The "both" in this case is taken to mean, for the sake of argument, carbine, rifle, or BAR *plus* the pistol.

First, let us state a problem and then go on from there. The problem is; does the Marine infantryman have all the weapons he needs, and is capable of carrying, for the completion of his mission? We think not.

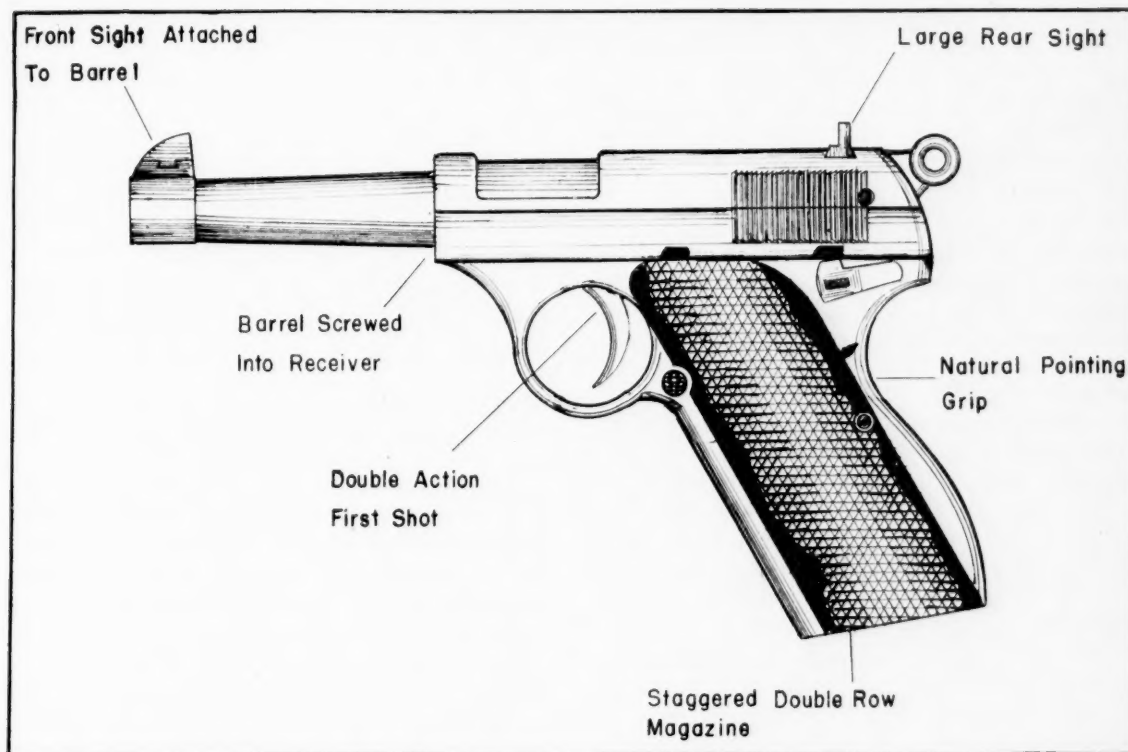
The marine needs long and short range, flat and curved trajectory weapons to complete his mission. In the long range flat trajectory class there is the rifle, carbine, and BAR. These, plus the bayonet, serve also as short range weapons, although their length and weight, often make them awkward for close quarter fighting. Rifle and hand grenades comprise the weapons in the long and short range curved trajectory categories. This arsenal looks impressive and a marine who arms himself with it would seem to be well-equipped to deal out murder and mayhem to the enemy. Certainly it is difficult to ask him to carry more than this when he is already so heavily burdened. But let us take a close look at some of the contingencies for which the marine is not properly equipped and which arise all too often.

The marine is closing with the enemy or the enemy is closing with him and something happens to his one firearm, his primary weapon. It jams; runs out of ammunition; or is disabled by a bullet, shell fragment or just plain dirt. Another frequent occurrence in the above situation is a bullet from a rifle or carbine failing to stop a charging enemy who keeps coming by momentum and reflex action. Readers who have seen even a little infantry combat won't have to try their memories to recall many such incidents from hearsay if not from personal experience. The stock solution to this situation seems to be right out of the book and is: "Close with the

bayonet" or perhaps "throw a grenade", or, and this from the optimists, "a buddy will get him before he gets me."

Upon closer scrutiny the first answer, although steeped in tradition, seems a trifle out of date in this age of fire power. Up to this point in a battle we have massed supporting weapons and units in order to get the infantry up to the enemy's position with a minimum of casualties. But when the infantry get there it throws these favorable odds out of the window by "closing with the bayonet." This puts them at best on a par with the enemy who may have a longer bayonet, more skill with it, or a round in the chamber of his rifle. Why should we be parsimonious? Why not manipulate the odds back in favor of the house and give the marine a weapon in addition to the rifle and bayonet but much more effective than "cold steel" or a clubbed rifle in a tight spot at close range? To "throw a grenade" may be an acceptable answer, but if there is no cover a grenade would endanger team mates as much as the enemy. As for the optimists' solution, the buddy who is going to save the day may be having the same trouble with his weapon, may be a casualty, or may be just too busy with his own enemy to be counted upon.

THEREFORE the Marine infantryman in combat does need an effective supplementary weapon. It must be a firearm in order to reach out beyond hand-to-hand range. It should be light in weight as marines are well loaded down already. Probably most important, *it must be easy to shoot*. This calls for a comfortable, natural pointing grip and the recoil and report should not be excessive. This firearm should be quick into action. The design should permit it to be carried loaded with the hammer down and fired without having to operate a safety but merely by a continuous pull of the trigger; in effect, like the double action feature of a revolver. It should be carried in a suitable holster permitting a rapid and unhindered draw but also protecting and securing it properly. It must be of fairly large caliber, shooting as



An ordnance draftsman visualizes the ideal combat pistol as described by Maj Nihart. Its resemblance to the Walther P-38 is more logical than coincidental.

heavy a bullet as is ballistically practicable to insure sufficient shock power to stop a charging enemy. As many rounds of ammunition as is consistent with weight and design limitations should be carried in the magazine.

The characteristics obviously add up to a pistol of some type but not necessarily the caliber .45 pistol which does not fulfill these requirements adequately. The weight of the .45 is not excessive for our purposes but an adequate pistol weighing one-third less could be designed. The argument that we are trying to saddle the already over-burdened foot troops with additional weight is answered by the fact that a large number of infantrymen willingly carried the extra weight of pistols they bought, salvaged, stole, captured, or talked out of the property sergeant. This should be some proof of the need for a supplementary weapon and the willingness of the users to carry one.

EASE in shooting, we feel, is the most important characteristic required in this weapon. Most of us will agree it is in this characteristic that the .45 is grossly deficient. Ease of shooting means increased confidence in the weapon and greater skill with it by all hands. It also means economy in ammunition expenditure to obtain this skill. The confidence the .45 inspires is

epitomized by the oft-repeated cliché that "the effective range of the .45 in combat is five yards." And in the hands of the average marine this is unfortunately all too true.

That the .45 is an abomination to shoot is a common gripe among its users. It is muzzle heavy, the sights are too small, the grip doesn't begin to fit or even conform to the hand, it kicks like a mule and has a report approximating that of a rifle. That confidence in the .45 is small and skill in it difficult to develop is evidenced by the low qualification scores, except, of course, when the time and ammunition allowance for practice were liberal. This is in contrast to many law enforcement agencies in this country which develop their recruits into effective hand gun shooters in a minimum of time with an easier-to-shoot weapon. Nor is the .45 as accurate as is desirable. As issued it is frequently unable to group its shots within a ten-inch circle at 50 yards. For effective shooting at this range, such as match shooting, specially doctored "accuracy jobs" are used. At greater ranges it probably would not group shots into an area the size of a man. The skeptics to the contrary, effective shooting at man-sized targets with an accurate pistol supported in a steady position at ranges up to 100 yards is possible.

Usually when a man is close enough to use a pistol on an enemy he has to use it in a hurry; therefore the marines' pistol must be capable of being brought into action quickly. With the .45, if it is to be carried in absolute safety, the chamber must be empty. To fire, the slide must be pulled back and released. This is time consuming and requires the use of both hands. If a round is carried in the chamber, the hammer is cocked with the safety on or the hammer is down. To fire, either the safety must be released or the hammer unhandily cocked. Also, when carrying the pistol cocked on safe, the safety may be displaced, thereby rendering the pistol dangerous. With a weapon, revolver or automatic pistol, of the double action type the chamber may be loaded with the hammer safely down, the firing pin not being in contact with the cartridge. It is brought into action after drawing from the holster with a continuous pull on the trigger which cocks and releases the hammer in one motion.

There is no argument as to the shocking or stopping power of the .45; it has it and enough to spare. However there are lighter, easier-to-shoot weapons having sufficient power. The magazine of the .45 holds seven rounds but by using a slightly smaller cartridge twice as many rounds can be carried without increasing the length of the magazine or making it unduly bulky. This could be accomplished by using a magazine holding the cartridges in a staggered double row.

THESE, then, are the characteristics required in a supplementary weapon for combat marines. If the .45 does not fulfill these requirements, what then, can we substitute? As a substitute standard but not as a final answer to this need we submit the .38 revolver, Colt or Smith and Wesson, as issued to Marine and Naval aviators and Navy shore-based personnel during the war. It was justly popular among combat marines who paid high prices in cash, liquor, or souvenirs to Seabees and others to obtain one. It is light, being one-half pound lighter than the .45. It is easy to shoot as anyone familiar with it will testify. It is quick into action, as one pull of the trigger both cocks and releases the hammer. It is sufficiently hard hitting, and, being easier to shoot and inherently more accurate, greater skill is attained with it making possible more hits in killing areas. The big disadvantage with this weapon is the ammunition capacity and slowness in reloading. The cylinder holds only six rounds which must be individually reloaded before firing can be resumed. This weapon admittedly is not the last word in hand gun design but is

suggested as a stop-gap, better suited to the task than the .45.

Is there then a weapon existing which fulfills all our requirements? The answer, unfortunately, is no; although one or more of these characteristics exist in certain pistols, all characteristics do not exist in any one pistol. With Axis-owned patents being made available to American manufacturers, desirable features of several foreign and domestic pistols could be combined into one that should meet the above requirements.

A SYNTHESIS of the best points of many pistols might give us a pistol like the following. For a comfortable, natural pointing grip we might borrow the type of the Luger, Nambu, or Colt Woodsman, or that of the Walther P38 or Mauser HSc. To be easy to shoot and accurate, yet powerful enough, a cartridge like the 9mm. .38 automatic or .38 Special seems to be in order. To be quick into action the double action feature of the Walther P38 or Mauser HSc is the answer. A staggered double row magazine of the type found in the Browning M1935 manufactured in Belgium and Canada with its 13-shot capacity would afford considerable fire power. For inherent accuracy we must get away from the Browning type locking system characteristic of the .45. In this system the sights and barrel are independent of each other. The barrel is relatively loose and moves vertically as well as horizontally, resulting in considerable inaccuracy. Ideally, both sights and barrel should be integral. If this cannot be accomplished at least the front sight should be on the barrel and the relative motion between barrel and slide should be along the front-to-rear axis only. Types of locking systems better suited for accuracy than the Browning are those seen in both the Walther and Nambu. For further accuracy the barrel should be at least four inches long, but anything longer would probably be unwieldy. This is our answer to the need of the combat marine for a supplementary weapon. A pistol combining these design features could well become the most effective sidearm ever produced.

In conclusion then, the marine requires a weapon supplementary to his rifle or carbine. The ideal weapon has yet to make its appearance but let us not wait for it. The need is apparent; weapons are available in large stocks of .45 automatics and .38 revolvers. In training for combat and for use in combat if it should ever come again, let us issue every infantryman a sidearm to foreguard against that emergency when his primary weapon is inoperative or absent.

END

STOP FIGHTING THE JAPS

By Capt Leo B. Shinn

THE YOUNG STUDENT officer stood facing the instructor and gave his solution to the tactical problem which had been presented to the class and which he had been called upon to solve:

"Well," he began, "since the time is 1800, there isn't enough daylight left during which to continue the attack to the next hill. I believe I would have my whole battalion dig in where they are. I would pass the word that there would be no moving about whatever between dusk and dawn. That way, anybody who moved would be shot because it would be obvious that they were enemy. I figure that the enemy capability most likely of adoption would be a Banzai attack against my position sometime during the night—possibly just after dusk or just before dawn. I would take measures against this. I would then assign one company the job of providing one platoon to begin combing the battalion area at dawn the next morning for enemy snipers who had infiltrated our lines during the night."

The above solution, admittedly fictitious, is nevertheless typical of many that are being offered by students in our military schools *at the present*. Whether it is sound or unsound tactically is unimportant. It does contain certain provisions which are food for debate—as will be seen later. The important point, however, is that it illustrates the trend of much of our military thinking at the present, especially among younger officers. Today, almost a year after the cessation of hostilities in the Pacific—in our tactical reasoning, we are still fighting the Japs!

And we shouldn't be.

While this tendency is not exactly dangerous, some of its aspects are definitely undesirable.



It is the design of this article to analyze the causes and, more important, the effects of this tendency and to recommend a few specific measures which should be initiated immediately to correct it.

The habit of "fighting the Japs," which exists among instructors and students alike in many of our service schools, is obviously due to the fact that all of the tactical instructors and the large majority of the students have had combat experience in the Pacific. That it exists among students is apparent by observing the logic they often apply in solving a tactical problem. The majority of instructors, for reasons apparently more political than military, refrain from using the word "Jap" in their discussions of "the enemy." In many of the situation and requirement type problems, however, the "enemy" all too frequently exhibits a "Banzai" nature, the habit of attacking and infiltrating our lines at night, and other characteristics which are unmistakably Japanese.

When faced with such a problem, it is second nature for the student to think of the enemy as being Japanese, to take advantage of his past experience in actual combat against the Nips, and to solve the problem accordingly. This trend of thought is also frequently apparent in our everyday "shop talk."

Not long ago, for instance, the author heard a Marine officer of field rank remark that he considered training in the camouflage of command

Years of fighting the Nips caused us to lose sight of other nations' war habits

posts, supply installations, etc., a waste of time. Having fought the Japs in fast moving situations where friendly air superiority was constantly taken for granted, that officer obviously had never seen a necessity for such training. He may in the uncertain future, however, be obliged to revise his opinion of the value of camouflage.

In the profession of war, there are certain tactical principles which change little, if any, whether the year be 1000 or 2000 A.D. and whether the war be with Mesopotamia or Mars. It is only the application of these principles which alter, due to improvement of the implements of war, variations in terrain conditions, and changes in enemy tactical practices. In the war in the Pacific, as in any war, it was only natural that we should study continuously the enemy's national psychology, his tactical "habits," and his weapons. By doing this, we became more and more able to cope with him on the battlefield and the result was increased economy in personnel and materiel casualties. Furthermore, the practice of devoting a large part of the curriculum in our tactical schools to a study of the Japanese enemy and the most efficient means of defeating him was certainly sound practice while the war was still in progress.

AS members of the military profession, we are inclined to remember vividly the tactics and techniques we saw applied in actual combat. Having seen them succeed repeatedly, they more or less become "doctrine" with us. It is good that we do this, and it is indeed fortunate that the large majority of our present Marine Corps officers are graduates of the school of actual combat. Unfortunately, however, we also have a tendency at times to forget that those tactics and techniques we saw succeed so frequently were being applied against a particular enemy, with peculiar characteristics, and under a certain set of conditions. We thus lose sight of the fact that what might have been the "ideal" way to cope with the Japs might be far from the most efficient way to cope with our next adversary.

The war in the Pacific provided our forces with a laboratory in which the science of amphibious warfare was immeasurably advanced and in which were developed many tactics and techniques which will be applicable to the amphibious war of the future, whatever the nature of the theater and the characteristics of the enemy may be. Some of those tactics and techniques, however, were born of, and were applicable only under, the conditions which existed in the Pacific war but which may not necessarily exist in the next war. On the other hand, those conditions which existed in the war in the Pacific caused us to omit a number of tactical measures which may be of major importance

against our next enemy. Let us examine some of these conditions and note the influence that each exerted on the tactics we employed:

To begin with, our almost constant air superiority (in the latter stages of the war) gave infantry leaders little or no experience in defense against air attack. There were air raids, of course, but they were usually conducted against our shipping and our airfields. Comparatively few infantry officers were ever faced with the task of holding a hill in the face of a daytime counterattack supported by enemy aircraft. The most noteworthy result of this condition, however, was the fact that camouflage of installations and camouflage discipline in general were virtually non-existent on the Pacific battlefield.

The Japanese numerical and technical inferiority in tanks rendered it unnecessary for our infantry unit commanders to study or to utilize strong measures against a determined and well-planned enemy mechanized counterattack. This condition existed, in varying degrees, with respect to artillery and the other supporting weapons.

The Jap's habit of launching "Banzai" attacks and of infiltrating our lines during the night became familiar with practically every marine in the Pacific. The inevitable solution was for every American in the battle to dig in at dusk, remain motionless, and shoot anything that moved.

A CONDITION which existed in the Pacific theater (and in the European) was the absence of gas attack by either friendly or enemy forces. As a result, the majority of us accorded very little importance to studying defense measures against gas attack.

Omitting infantry antiaircraft defense, camouflage, anti-gas defense etc. from our tactics during the war in the Pacific was perfectly logical because there was no need for such measures. But to omit these subjects from our own personal tactical doctrines of the present and from the scope of our peacetime training is definitely neither logical nor sound. And that is exactly what we are inclined to do because, when we study a tactical problem or conceive a tactical situation, we subconsciously inject into it the same conditions under which we fought in the Pacific—including, in many cases, even the national psychology of our former enemy.

It is realized that amphibious operations of the future will, in all probability, be conducted under conditions of friendly air superiority when possible, and that many of the other favorable conditions will again exist. There is no certainty, however, that the enemy will not at least gain temporary air superiority occasionally nor that the other favorable conditions will not cease to exist now and then. It is almost certain that our enemy of the future will use entirely different

tactics and that his characteristics and national psychology will differ from those of the Japs.

We are therefore behooved to return as soon as possible to basic tactics and techniques which are general, rather than specialized, in nature and which can be modified to suit any set of tactical conditions. This is especially important during the present period of transition because the younger officers who are performing and undergoing instruction today will be the senior troop commanders of tomorrow. In view of this fact, they should now be absorbing a tactical knowledge which is broad and open-minded in scope.

In order to promote this policy, the following specific recommendations are offered, to be applied wherever practicable in all phases of tactical training to include our tactical schools, field maneuvers, and troop training:

1. Include an appreciable number of tactical problems (not necessarily the majority) in which the student is obliged to *attack* an enemy who has at least temporary superiority in aviation, artillery, tanks or other supporting weapons—or in several of them.

2. Devote considerable study to the possibility of night operations to include night attacks and especially to include night reconnaissance patrolling by front line units.

3. Give the student more training in camouflage, anti-chemical defense measures, and other aspects of war which were of minor importance in the Pacific war but which may be of major importance in the war of the future. Include tactical exercises in which he will be required to utilize this knowledge.

4. Eliminate, wherever possible, those place names, terms, and characteristics of the enemy which suggest that the student is fighting Japanese troops.

5. Provide the enemy with similar organization, with respect to personnel and materiel, to our own.

And finally, in our own tactical reasoning, let's cease thinking of the enemy as having those peculiar characteristics and habits with which we became so familiar in combat against our former enemy. *Let's stop fighting the Japs.*

END

Who Were These Fast-Talking Fighting Americans?

THE GERMAN general who thought he had ten thousand Americans "holed up" in Bastogne must have had a rude awakening when the commander answered his demand for surrender with a Yankee slang word of withering contempt. He didn't know Uncle Sam's fighting men hold to an old tradition in warfare—they talk up best when the going gets hardest.

Here's a quiz on ten of these sayings that grew out of the heat of battle. The object, of course, is to name the Americans who spoke these fighting words. Give yourself 10 points for every speaker you can identify. A score of 70 is Fair, 80 is Good, and 90 is Excellent.

Correct answers will be found on page 31.

1. "General _____ never surrenders."

2. "I shall return."

3. "I have not yet begun to fight."

4. "Nuts!"

5. "You are going to meet a savage enemy. Meet them like Americans."

6. "Damn the torpedoes! Full speed ahead."

7. "I propose to fight it out on this line if it takes all summer."

8. "Don't give up the ship!"

9. "Stand your ground. Don't fire unless fired upon. But if they mean to have a war, let it begin here!"

10. "Retreat, Hell! We just got here!"

The Development of AMPHIBIOUS TACTICS

in the U.S. Navy

By LtGen Holland M. Smith

THERE ARE two considerations which influence the development of tactics during peacetime: (1) the conditions of geography, terrain, climate, hydrography, and enemy tactics likely to be encountered in prospective theaters of operations; (2) the scientific developments in armament, armor, and other material of war for which tactics must be devised. The "how" is largely determined by the "where" and "with what." The lessons learned in combat operations must be accurately evaluated and applied where similar conditions exist. Therefore, experience, together with intelligence and scientific research and development, form the basis for new doctrine. Realistic maneuvers will serve to demonstrate the adequacy of tactics in execution and indoctrinate troops for the employment of such tactics in combat. The doctrine, however, can not be considered sound until it has been so proved in actual combat.

The effect of these factors was evident in the development of modern amphibious tactics. It was not until the United States was faced with the possibility of conducting a major offensive campaign in the Pacific against a competent power, equipped with modern weapons, that the Navy began a serious study of tactics for assaulting defended beaches. The study was based on our experience in the Spanish-American War and on the more recent experiences of the British at Gallipoli in 1915 and the Germans at Oesel and Dago Islands in the Baltic in 1917. The doctrine contemplated the employment of the latest weapons and equipment and was changed or amplified as new material was developed which demanded new or revised techniques. The experience of training exercises was continuously applied. Between 1920 and 1935 a landing operations doctrine was developed and an organization established with which to test it. The Fleet maneuvers conducted between 1935 and 1940 provided a practical basis for judging the adequacy and for revising certain aspects of this

doctrine. Then when it became apparent that we would be called upon to use amphibious tactics in war, an intensified program of amphibious preparedness was initiated, which gained full momentum in 1942.

Prior to the World War I, the organization of an advanced base force in the Navy and the study of tactics for its employment had stressed defensive aspects. Interest in this field had been kept alive by the Marine Corps, but other tasks with the Navy at sea and on expeditionary duty on foreign shores required the services of most of the Corps' limited personnel. There was no need during the war to employ the advanced base force. Naval operations were directed chiefly at supporting military operations on the European continent by maintaining trans-oceanic lines of communication. There were no operations in the Pacific. Consequently, there was no urgency to stimulate a general interest in landing operations.

The British attempt to seize the Gallipoli Peninsula in 1915 in order to force a passage of the Dardanelles and threaten Constantinople was unsuccessful. However, as a result of the extensive analysis of the causes for this failure, many lessons were learned and many conclusions drawn which had a widespread effect on the study of amphibious tactics. The conclusions drawn varied widely. The British decided that daylight assault landings should be avoided at all costs and that surprise and speed and, therefore, night operations were essential to success. The effect in the U. S. Marine Corps was to shift the emphasis in advanced base force tactics to the offensive aspects of landing operations.

In February and March of 1915, a purely naval attack was delivered by a combined British and French squadron against the forts on both the European and Asiatic shores of the Straits. The attack was not vigorously prosecuted although in the final bombardment the attacking force had reduced the forts to a condition where the defenders were prepared to abandon them.

Part III: birth of the FMF, fleet maneuvers, conception of amphibious doctrines

The attack was broken off with success in view because of the loss of several ships, which were probably sunk by mines. If, in spite of the losses sustained, the waters had been swept of mines by the vessels which were available in the area for that purpose and if a landing force had been put ashore promptly to secure communications with the rear, the Naval squadron might well have proceeded to Constantinople and forced Turkey out of the war. However, the advantage of superior naval power was not thus exploited. The British generally were left with the belief that naval guns were not well-suited for shore bombardment. Their flat trajectory denied them the destructive effect at long ranges which was achieved by the plunging fire of howitzers and other field artillery weapons. The U. S. Marine Corps concluded, however, that the British had failed to capitalize on the naval bombardment, which actually had been successful, by landing troops immediately.

IT WAS decided to abandon the purely naval attack and to land a large military force on the Gallipoli Peninsula to secure the Straits and permit the passage of the Fleet into the Sea of Marmora. The organization, assembly, and preparation of the landing force in the staging area at Lemnos Island took over a month's time, and in the interim the Turks reinforced the Straits and organized a well-equipped and numerically superior force under German leadership, which was disposed in a flexible defense which took every advantage of the favorable terrain. Turkish communications overland as well as between the Asiatic and European shores were maintained throughout the campaign in spite of British submarine activity, and the defenders were consequently able, by reinforcement, to maintain a superior force. If the British had had aviation for reconnaissance and interdiction, they might well have prevented such reinforcing. The chief cause of delay in undertaking the landing was the failure to load the troops and equipment of the 29th Division aboard transports in a manner to facilitate their rapid debarkation and tactical employment ashore. As a result, the transports had to be returned from Mudros Bay to Alexandria for "combat loading."

On 25 April, a landing force of 78,000 men, consisting of the Anzac Corps (31,000 men), the 29th Division (18,000 men), the Royal Naval Division (11,000 men), and the French Colonial Division (18,000 men), under the overall command of Gen Ian Hamilton, was landed on three beaches on a 60-mile front. The landing force was embarked on 60 transports which were part of a 300-ship naval force under Admiral de Robeck. Hundreds of small craft and lighters had been assembled from all corners of the Mediterranean for the ship-to-shore movement.

All landings were covered by the gunfire support of naval vessels.

The Royal Naval Division, which consisted of sailors of the Fleet and which was poorly equipped and untrained, conducted a demonstration in the Gulf of Zeros at the northeastern base of the Peninsula.

The Anzac Corps, assigned the secondary objective, landed ten miles northeast of the tip of the Peninsula at Ari Burnu. The ship-to-shore movement was successful. 8,000 troops were put ashore without loss in three hours, and the entire Corps had been landed in the afternoon. The attack force approached the beach with the covering naval vessels in the van, firing preparatory bombardment and providing continued support of the landing. 1,500 troops were landed at 0420 hours in the first wave from attendant ships closely following the bombardment vessels. The second wave, 2,500 troops, was embarked on destroyers and was ashore an hour later. The main force of 12,000 troops was embarked on twelve transports. The Turks did not consider the Anzac beachhead required fixed defenses and the landing itself was, therefore, unopposed. However, the 19th Turkish Division, in mobile reserve, counterattacked at 1600 and inflicted heavy losses, totaling 5,000, on the Anzac Corps.

THE 29th Division made the main landing on five beaches on Cape Helles at the tip of Gallipoli Peninsula, designated from left to right: Y, X, W, V, and S. These beaches were narrow, thousands of yards apart and dominated on the flanks and from the rear by high, rugged ridges. The landings were conducted in daylight. A force of 2,750 (supported by the fire of battle-ships) was landed on Y beach without loss. However, like the Anzacs, this force was counter-attacked by strong Turk detachments which forced it the following day to withdraw from the beach and abandon the landing. At X beach, 2,050 troops were landed with few losses. However, W beach was strongly defended. Underwater barbed wire obstacles and wire on the beach were covered with enfilade machine gun and rifle fire from well-protected and entrenched positions, and the British losses were very heavy. V beach was similarly defended. Here the British attempted to run a converted collier, the *River Clyde*, up on the beach in order to land troops and provide a strong base of fire to support the attack. However, the ship was not entirely beached and almost all of the men who attempted to land in file from narrow ramps during the daytime were killed. The landing at S beach in Morto Bay was only lightly opposed.

The French Division conducted a demonstration at Bashika Bay on the Asiatic shore and subsequently landed one regiment in a diversionary attack across the Straits from Helles. The landing was successful and the force was

withdrawn two days later. The remaining five battalions were maintained in general reserve afloat.

These were the assault landings in which the landing force, in spite of severe losses, was successfully put ashore. However, in the four months that followed, the expeditionary force was never successful in establishing a secure beachhead. The campaign ashore suffered for lack of ammunition and replacements and from sickness. Although cooperation between the Army and Navy was excellent, the logistic buildup on the beaches was never sufficient to achieve even a local superiority of force ashore. The vessels of the Fleet supported land operations with bombardment, but this support was not closely coordinated with the advance of the troops. The enemy took advantage of this intelligence to close with the British front lines during bombardments and thus avoid the destructive effects of the naval gunfire. As previously noted, the British had no air power with which to support the landings. Although the troops ashore fought with outstanding vigor and courage, the employment of available reserves was not directed at exploiting unopposed landings but rather was thrown into the bitterly defended sectors. The beaches chosen for landing were not good.

THE lessons learned by the British in this operation have been well stated by Adm de Robeck's Chief of Staff, Admiral of the Fleet, the Lord Keyes:

"Among the most valuable lessons we learned from the original landings was the folly of attempting to storm a defended beach in daylight. All our amphibious operations after this, whether attacking or evacuating, were carried out with as many hours of darkness at hand as possible and also have a regard to the vital importance of surprise, doing nothing to disclose our intentions before dark."

A further conclusion implied in the foregoing was that naval gunfire is of limited value in support of landing operations. The conclusions drawn by the U.S. Marine Corps were the value of a heavy volume of accurate gunfire at close range in destroying shore positions; the necessity for detailed, coordinated, and flexible planning to include the provision of combat loading, for rapid landing and the buildup of land-based artillery and supplies following the initial assault; the necessity for speed and deployment on a broad front in the initial ship-to-shore assault; the importance of choosing favorable beaches, destroying defenses in the immediate landing area, and neutralizing enemy positions in the rear and on the flanks which might oppose the landing; the need for a technique for coordinating naval bombardment in close support of land attacks; the need for a naval air arm to

support landing operations; and, finally, the need for vigor and resourcefulness in all phases of the operation to exploit the inherent mobility of seapower.

After the capture of Riga from the Russians in the autumn of 1917, the Germans conducted landing operations at Oesel and Dago Islands at the northern end of the Gulf of Riga in order to threaten the Russian position at Petrograd. The landings, based on surprise, were the result of careful study and joint training in debarkation methods.

A reinforced division of 13,000 men was landed with the support of ten battleships and cruisers and several other light naval vessels. Although the landing and the rapid capture of the islands succeeded in precipitating the collapse of the Russian Army, three German ships were damaged by mines, and so again the hazards rather than the advantages of landing operations were stressed. However, the value of joint preparation and training, combat loading and speed in execution were forcefully reiterated by these operations.

WHILE the study of amphibious tactics in the light of war experience was in progress at the Marine Corps Schools at Quantico, Virginia, and to a lesser extent at the Naval War College at Newport, marines of the Fleet and the East and West Coast Expeditionary Forces (as the advanced base force had come to be known by 1921) participated in small scale landing operations which were a part of annual fleet maneuvers. Although these operations were on a small scale and patterned generally on the prewar maneuvers, they sufficed to keep alive an interest, and as the interest grew, they led to the formation of a permanent amphibious organization in the Fleet.

Postwar demobilization and assignments to overseas expeditionary duty greatly handicapped the existence of an adequate advanced base force in the Marine Corps until 1933. However, a technical regiment was organized at Quantico in 1920 and a second advance base force headquarters was also activated at San Diego. Experience under the Army in the war led the Marine Corps to conduct land maneuvers ashore for several years. Although these exercises were conceived as landing operations, the actual landing was in every case constructive and the emphasis was on land tactics. In 1921 the East Coast Advanced Base Force, consisting of a brigade headquarters, the 5th Marine Regiment, a skeletonized 6th Marine Regiment, signal, engineer, searchlight, and antiaircraft battalions, an artillery regiment, and an aviation unit, maneuvered at Wilderness Run, Virginia. The following year exercises were held at Gettysburg, Pennsylvania. In 1923, Virginia was again the

Continued on page 43

Pity The Poor Private

By LtCol William K. Jones

THE SPECTER of boring training programs again hovers over the Marine Corps. The conscientious commanding officer dreads the impending struggle he knows he will encounter in trying to have a well-trained outfit. But pity the poor private. Fortunately he probably doesn't realize what is in store for him now that the shooting has stopped.

The picture of junior officers and their NCOs laboriously plodding through the assigned hour of instruction while the understandably bored audience dreams of liberties past and future is something that no one desires. However, now that the "immediate combat" incentive to learn has gone, we wonder what we can use as a substitute. Better instruction seems to be the most logical substitute.

Before an officer is allowed to instruct in any of the Marine Corps Schools, he is required to complete satisfactorily what is known as "The Instructors Orientation Course." This excellent two-week period of instruction makes one realize how attainable first rate instructional techniques are to every professional marine. It would be desirable for all officers and all NCOs in the Marine Corps to attend this or similar schools.

Since this is not likely, the wide use of the training publication prepared by the Schools for this course would be very beneficial. In the "Manual For Instruction," MCS 2-6, on page number one is this statement, "All instructors should realize that good teaching is a skill *which can be learned*, and that anyone who is given the job of teaching others can improve his effectiveness by careful attention to certain basic principles." Organizations conducting frequent officer and NCO schools based on this manual would undoubtedly see great improvement in the quality of the instruction given to the troops.

After learning what constitutes good instruction, the question of how to accomplish it arises. No man can be thoroughly prepared to instruct in a large variety of subjects. Technique of rifle fire, squad tactics, interior

guard duty, map reading, all in one day or, in all probability, all in one morning, is the normal schedule for a platoon leader. He will do his best and the time will be used. However, most of it will be just so much "eye-wash." Furthermore, through no fault of the officer or NCO concerned, the bulk of this instruction will be dull, unimaginative, heavy, and usually a waste of time. The fault with this system obviously lies in the fact that the instructor does not have time for imagination, thorough research, or proper preparation. A training organization may be the answer.

Considering the infantry battalion, the present T/O has been proven in combat, but it should be remembered that it was designed primarily for combat and not for training. It would not be practical to change the T/O for all phases of the training program. However, for the individual basic training, the fire team, squad, and platoon training, this combat organization could be applied to training problems by the use of some imagination. Since the success of the battalion and even the entire division depends primarily on the combat efficiency of the squad and platoons, the setting up of a training organization for this individual and small unit training would seem to be well worth while.

One such training organization is shown in Figure 1. Actually as can be seen, it is not so much a special organization as it is the assignment of special duties to members of the present organization.

To encourage the use of training aids, the S-2 and his section prepares, cares for, and draws from division the charts, models, training films, etc., that are required. This would also set a uniform standard throughout the battalion as well as facilitating the trading of training aids between organizations.

Additional duties of the S-2 consist of being the officer in charge of the battalion reference library. This idea has already been tried with success. Its advantage is that it eliminates the dangers inherent in the obsolete and incomplete

With the cessation of combat, problems of peacetime training come to the fore

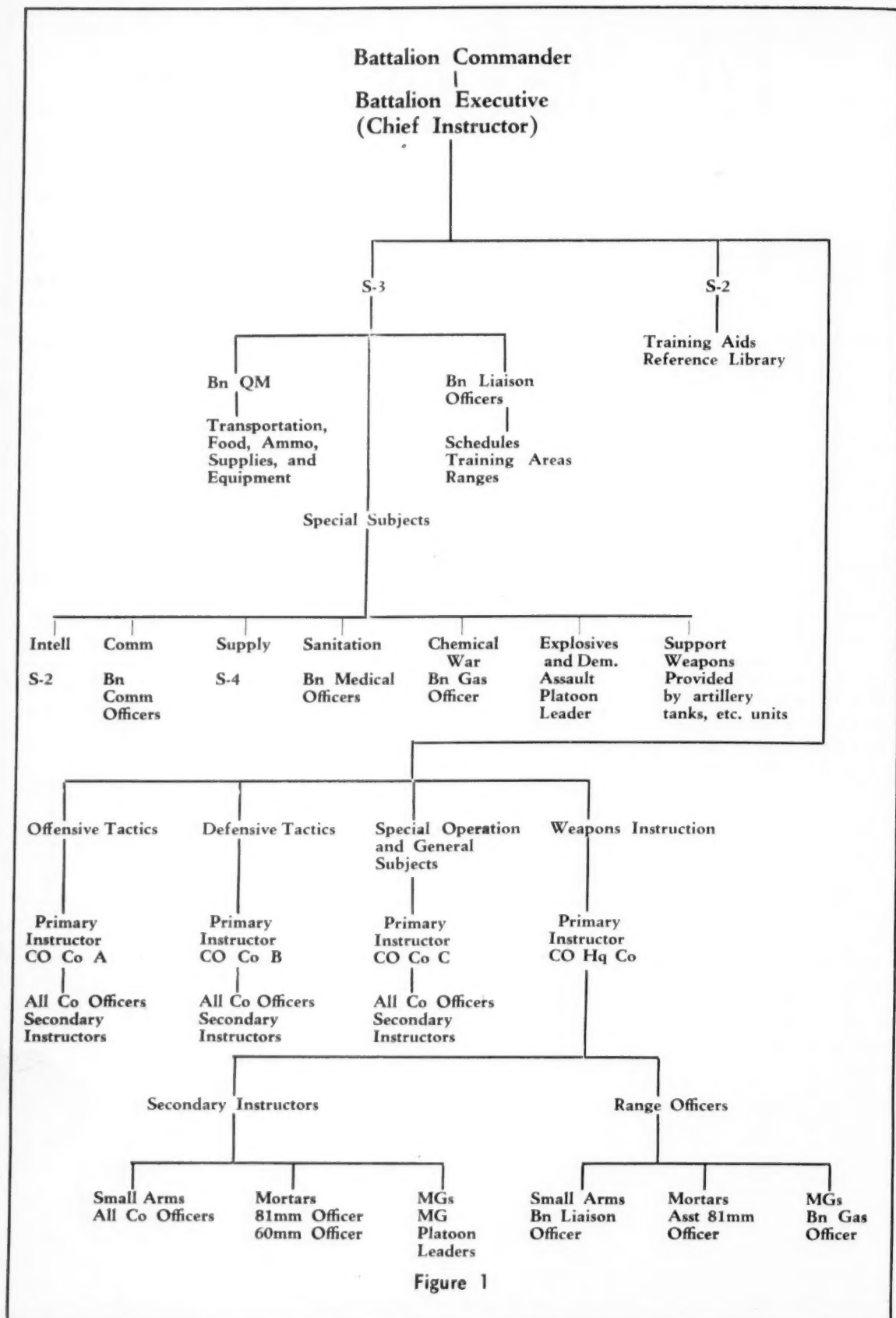


Figure 1

source material now carried in officers' book boxes and company chests. From a logistical standpoint, it drastically cuts the amount of worthless field manuals, books, and periodicals now carried by the individuals and organizations in an average battalion.

All instruction by specialists would be arranged by the S-3—the battalion staff providing the bulk of this instruction. Each private should understand the part played in the team by the various staff officers and headquarters sections. Before the war, the lowly "swab-jockey" was relegated to the end of the chow line and was the butt of many jokes. However, before Guadalcanal was secured he was affectionately called "Doc" and was the toast of the outfit. Why? Because the men learned the reason corpsmen were in a battalion. Furthermore, it has been proven that when the men understand through careful instruction how the S-2 is trying to help them, the souvenir value of an article takes second place to the intelligence value.

The arrangement for instruction by specialists from other units also comes under the jurisdiction of the S-3. Knowledge of the various supporting arms will not only give the individual more confidence in these arms but also will give him more confidence in the invincibility of the team as a whole.

Since the administration and coordination of the entire program is the direct responsibility of the S-3, he has been provided with sufficient assistants. His job requires time also for imagination. He should be a planner constantly trying to improve the quality of instruction and at the same time aiding in every way the other officers who are responsible for the actual teaching. To do this efficiently, he cannot be just a messenger boy, or the usual role—simply a high-priced clerk.

Instead of officers attempting the impossible feat of being proficient in all subjects at all times down to the smallest details, they would under

this system be able to concentrate their energy and imagination on related subjects. The instructions; therefore, would not only be greatly improved but would also be standard throughout the battalion.

The elimination of useless duplication of effort applies to all of the officers. As a result, more time is available for the proper preparation, rehearsal, and presentation of assigned instruction. Given the necessary time for planning, the individual instructor's imagination and enthusiasm will respond. When this happens, more interesting instruction is bound to result.

The fact that the entire training of the company would not be subject to the whims of its commander violates a long-standing concept. However, this idea grew in prewar days and caused senseless rivalry between companies instead of healthy competition. Actual combat taught us the value of teamwork and cooperation within an organization. To consider a battalion as just so many separate companies is to turn our backs on the experience we gained during the last few years. Any company commander that resents other officers' assistance in the training of his company is setting his personal pride above the welfare of his men and the efficiency of his battalion.

When the basic training has been completed and the company is ready to train as a team, then one man must be responsible for and present with his organization at all times. How well he fits these squads and platoons into an efficient company team is dependent upon his energy, enthusiasm, and imagination.

The proper training of any outfit large or small requires the same imagination, meticulous planning, and organization as does any other specialized operation such as a night raid or a combat patrol. For, training is definitely a specialized operation and should be recognized as such.

END

Quiz Answers

(From page 25)

1. Zachary Taylor (at the battle of Buena Vista, 22 February 1847).

2. Gen Douglas MacArthur (after leaving the Philippines in the spring of 1942).

3. John Paul Jones (at the battle between the *Bon Homme Richard* and *Serapis*, September 1779).

4. BrigGen Anthony C. McAuliffe (at Bastogne, December 1944).

5. John J. Pershing (to the American Expeditionary Force, June 1917).

6. David Glasgow Farragut (at the battle of Mobile Bay, August 1864).

7. Ulysses S. Grant (in the campaign before Richmond to General Halleck, 11 May 1864).

8. James Lawrence (at the battle between the *Chesapeake* and the *Shannon*, 1 June 1813).

9. Capt John Parker (at the battle of Lexington, 19 April 1775).

10. Marine Sgt Dan Daley (at Belleau Wood, March 1918).



"Dave's Dream" at Kwajalein—this is the B-29 that dropped the A-bomb on the 73 guinea pig ships clustered in Bikini lagoon on 1 July.

The Big Bang at Bikini

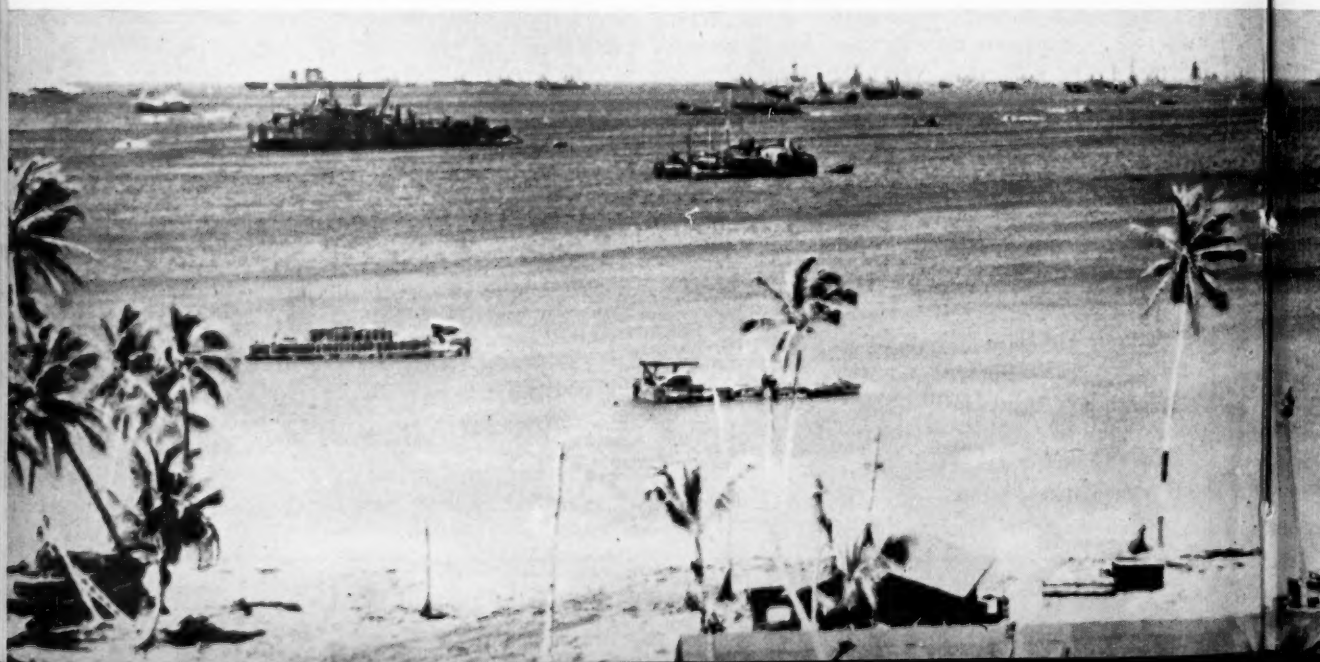
—as the camera saw it

U. S. Navy and AP photos



THE ATOM BOMB BURST IN I

Lineup for destruction. This picture taken on 25 June shows the lagoon chock-full of target ships and attendant operational craft.

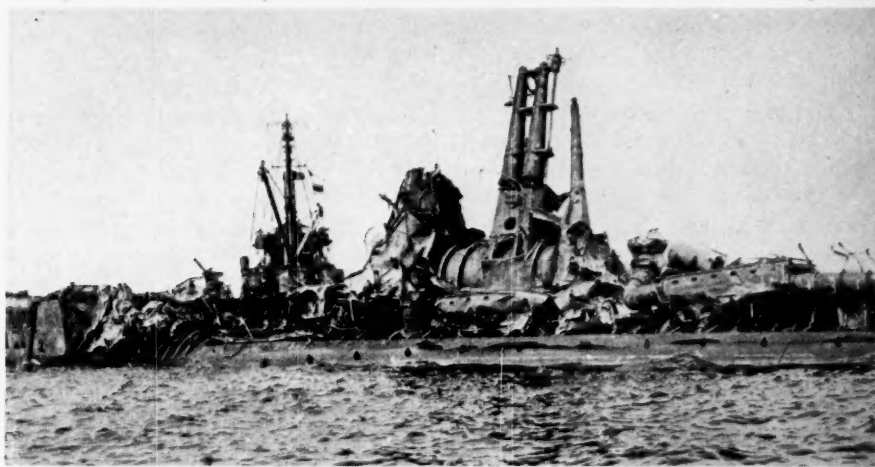




URST IN ITS TEST OF THE FLEET.



ViceAdm W. H. P. Blandy, task force commander, and members of his staff inspect the animal spaces aboard the "USS Burleson" before the explosion.



Her superstructure wrecked, the submarine "Skate," officially listed as "heavily damaged," rides uneasily in Bikini's waters after the blast.



With new changes contemplated, old timers raised
on the Springfield '03 are beginning to have new faith in

THE M1 AS A TARGET RIFLE

By Capt Dorn E. Arnold

WILL THE U. S. RIFLE, Cal. .30, M1 ever be a satisfactory target rifle? Could be. It will never be as good as the high priced, custom built, heavy barrelled, bull guns, but neither is the M1903. It may never be as good a target rifle as the M1903, but, sacrilegious as this may sound to some, don't go too far out on a limb that it won't.

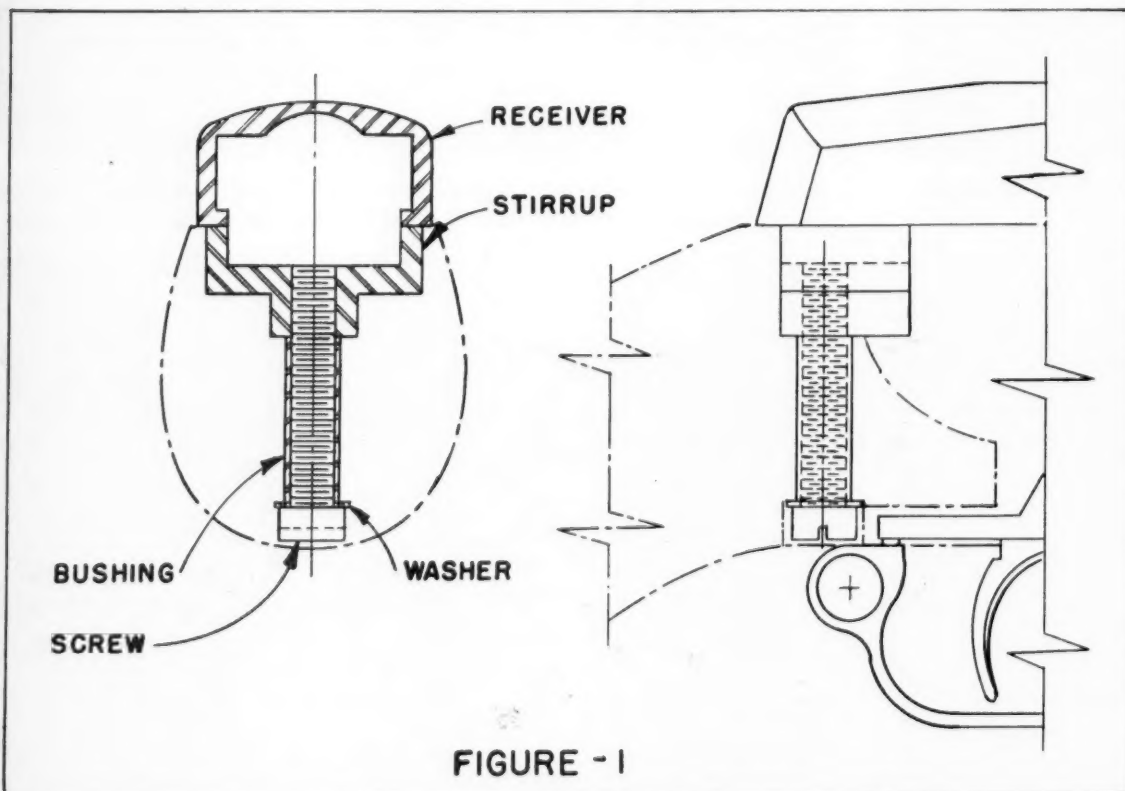
The men who "grew up" with the Springfield will swear that the M1 is not a rifle; that it has more stoppages than a boot's payroll; that it has all the balance and graceful lines of a warped and water-soaked pick handle; and that you are lucky if you can cover a sixteen shot group with

a new paper target. "I usta call 'em in or out, now I call 'em off or on."

Other men will swear, with equal sincerity that the M1 is the finest battle rifle in the world. Giving both groups of men credit for having equal combat experience and an equal desire to see good qualifications on the known distance ranges, it appears that the truth lies somewhere between their views.

The Springfield rifle has had the benefit of many years improvement, designed to improve its accuracy on the target range. The rifle that came out of World War I, as issued, was not an accurate target rifle. It is doubtful if it was any more accurate than the present issue M1.

Even so, few supporters of the M1 as a com-



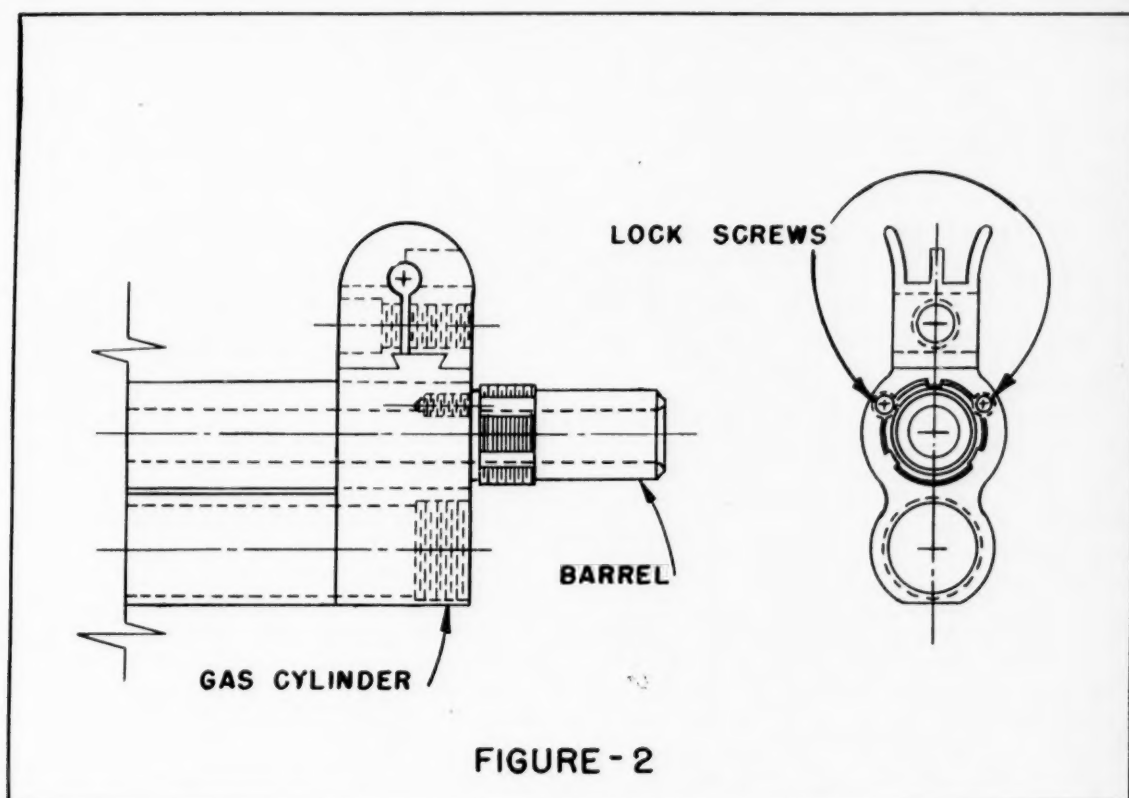


FIGURE - 2

bat weapon, will claim that it is as good a target rifle as the Springfield. The most-mentioned combat advantage is increased fire power.

Fire power and fire discipline are twin children and the confidence the marine has in his weapon and his ability to use it effectively are as important contributions to the health of these twins as any other factor. The marine obtains this confidence on the rifle range. That is the place where *he can see where his shots are going*. If his squad turns in a good performance on the combat firing range, he will believe (and tell all hands) that he got most of the hits. Now this is the kind of a guy you want—you want a platoon of them. That is why the combat rifle should approach the target rifle in accuracy. Make it as easy to shoot a good group on the range as it is possible without lowering the combat efficiency of the weapon.

The Ordnance School, Marine Corps Schools, decided to investigate the feasibility of modifying the M1 to improve its target range performance. Several "team shooters" who have had quite some combat experience were either on the post or were caught passing through and their suggestions were sought. Instructors in the Small Arms Section of the School and small arms armorers with field and range experience were brought in on the discussions. Headquarters, Marine Corps, authorized the use of ten rifles for experi-

mental purposes. After considering all suggestions that were not beyond the capacity of the machine shop and did not involve research beyond the capabilities of the personnel, it was decided to:

1. Attempt a positive lock between the receiver and the stock. It was found that the locking lugs of the trigger guard became worn and did not give a positive lock after the rifle had been in use for some time. This resulted in a movement of the receiver that in turn resulted in a vertical distribution of shots. Of the several methods suggested to overcome this defect, the one adopted was made and installed by Sgt David T Birge. This consisted of welding a stirrup under the rear end of the receiver and installing a guard screw through the stock to this stirrup (Figure 1). The idea of extending the tang of the trigger housing and installing the guard screw to hold this assembly to the stirrup is also under consideration.

2. Eliminate the looseness between the rear sight aperture and the rear sight base and make the sights smaller. Cpl John W Gardner and PFC Fred W. Carroll, Jr., fabricated new apertures to fit each base. This individual fitting resulted in a tight sight. The peep was drilled with a number sixty drill, reducing the peep from 0.073 inch to 0.040 inch. To date the front

sight blade has not been narrowed but will be cut down for additional experiment.

3. Fasten the gas cylinder securely to the barrel. The gas cylinder is splined with the barrel in three places to prevent any rotary movement and is held in position by the gas cylinder lock, which in turn is held by the gas cylinder lock screw. It has been found that vibration incident to firing often unscrews this lock screw and allows horizontal movement of the gas cylinder. Loose tolerance of splines and keyways allows a small amount of rotary movement. All this may be translated directly to the front sight blade. Cpl Gardner solved this problem by drilling and tapping between the barrel and the correctly positioned gas cylinder parallel to the axes of the bore and installing an Allen head screw on each side (Figure 2).

4. Determine if the lower band affected the ballistics performance by being in direct contact with the barrel. A vibrating piece of metal resting on metal sets up quite a movement. In the case of a rifle tube this vibration is taking place while the projectile is passing through the bore. To determine if this affected the shooting of the M1, some rifles were modified by relieving the lower band and taking a cut off the band seat on the barrel. A sheet of cork was fastened between the lower band and the barrel (Figure 3).

To bring all rifles to as near a common level

as possible some thirty barrels were gaged by WO Joseph Denno and barrels of approximately equal readings were used. A set of apothecary scales were borrowed from the Post Dispensary and hand loading was started under GySgt Edwin F. Beveridge's direction. Projectiles were sorted to give 149 grains and reloaded with 50 grains of powder.

Some shooting was done from a machine rest. The only results were that the hand loaded ammunition was better than issue and that the machine rest gave an additional problem. This rest was made for the Springfield and didn't work well with the M1.

A limited amount of shooting was done by members of the Western and Pacific Division Rifle Teams. These shooters believed that we might have something, but not enough proof firing has been done to draw any definite conclusions.

To complete this experiment it will be necessary to subject these rifles to exhaustive firing tests. By passing the rifles around among various qualified marksmen, it is believed that a spread in performance among these modifications will show up and the elements of human errors will be eliminated.

It may appear from this article that the M1, as now issued is believed to be a poor target rifle.

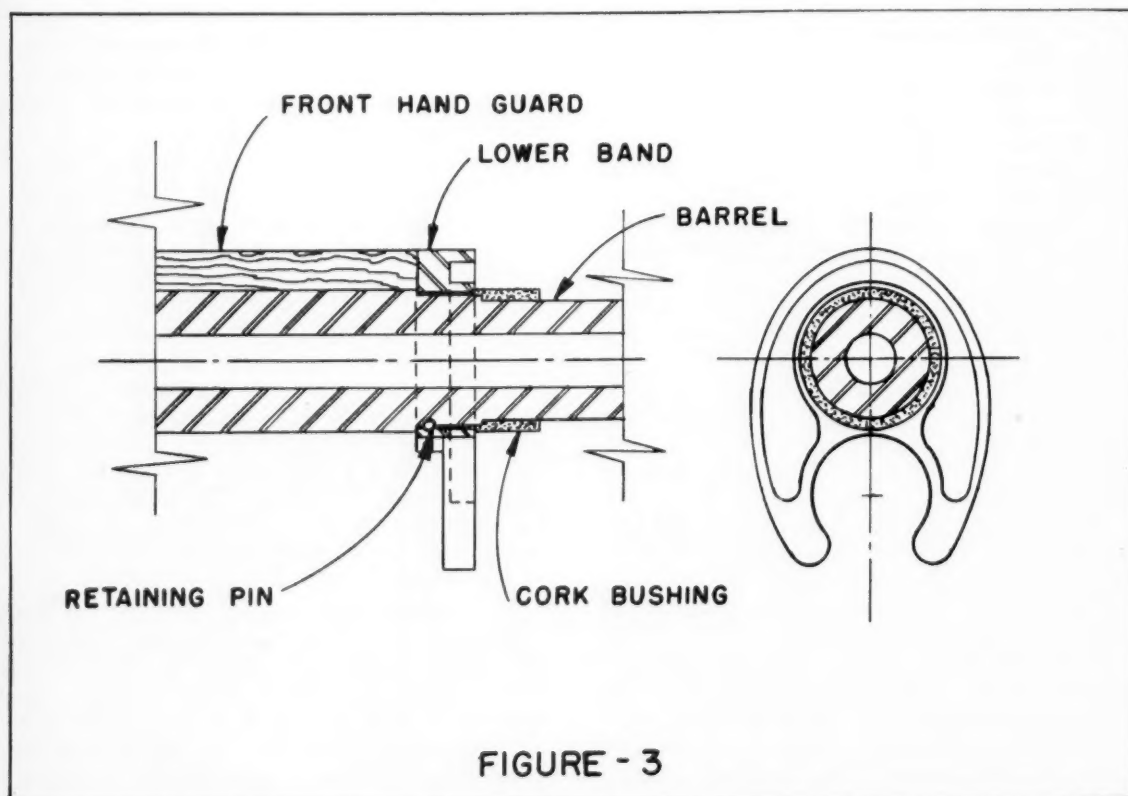


FIGURE - 3



The M1 rifle as now issued. Certain changes have been suggested which, if adopted, while not altering the outward appearance, will give the rifle a greater accuracy on the range. The ironing out of mechanical difficulties found in all new weapons will help build greater confidence in this rifle.

This is not true. During the tryouts and the matches recently concluded at Quantico, some very good scores were recorded with some rapid and slow fire "possibles" being turned in. Capt C. L. Floyd, from Parris Island seemed to be one who cruised among the 280 scores, a fair "country score" in any league. This score was not unusual before the war over a course that called for twenty shots at 1,000 yards, but the issue ammunition of today is not exactly Palma Match or Western Super-X either. Thirty-two shots rapid fire on a ten-inch five ring takes something also.

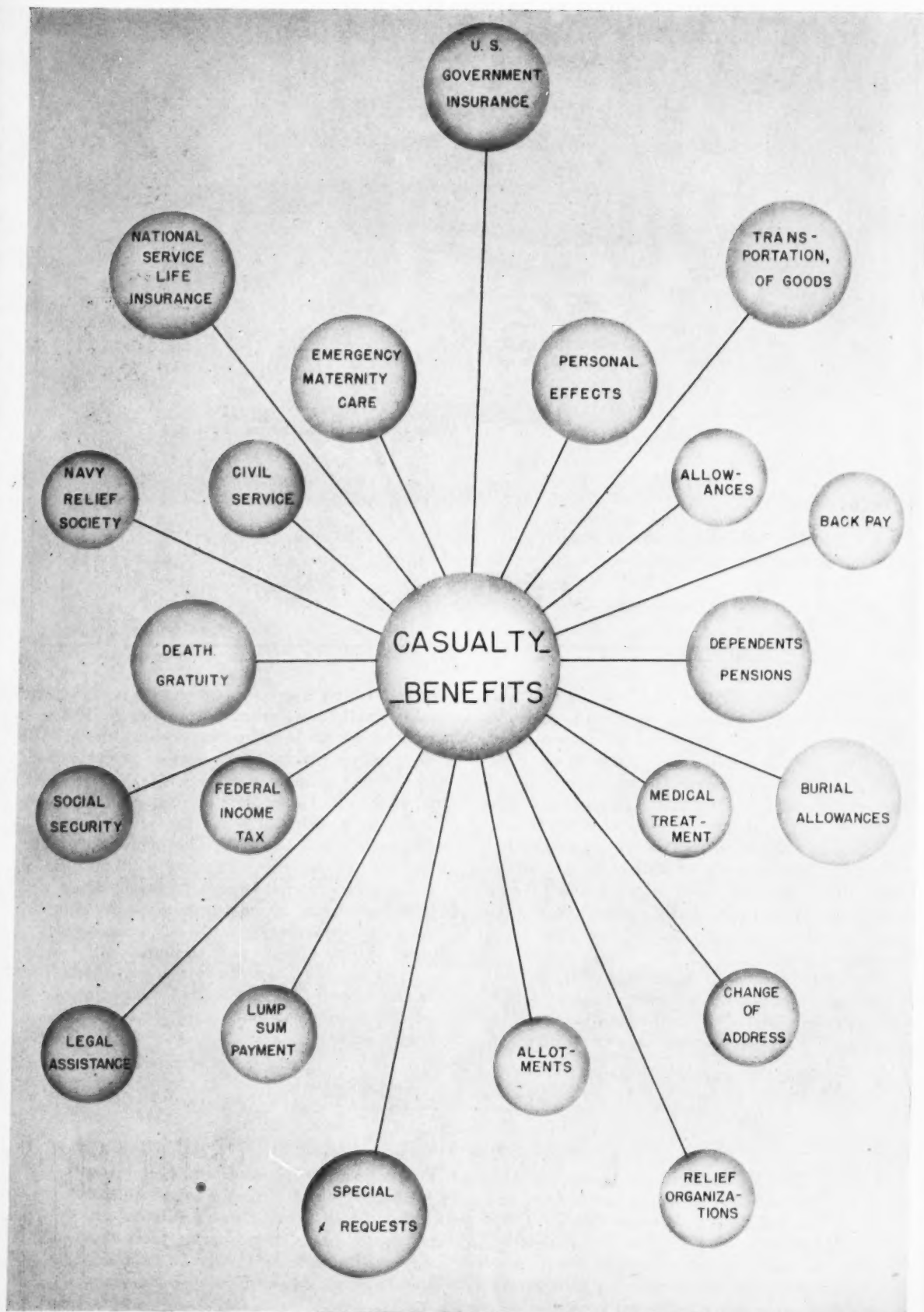
The individual who maintains that the M1 eliminated professional proficiency and brought in dumb luck and superstition and that the distinguished marksman is now on a par with a guy

who can't hit a hog in a barrel with a bucket of spuds, should have seen these matches. The expert with the '03 is still an expert with the M1.

To improve this rifle's target performance, many minor changes may be made. The present rear sight offers a problem for fast wind changes. To follow a fish tail wind the windage screw must be fast and accurate. The operation of the present one has been compared with opening a paymaster's safe. Heavier barrels may show up, the gas port may be moved to the rear, and the stock may be redesigned. Many people, Army, Navy, Marine Corps, and civilians, will take a whirl at it. Maybe we have made a start. The M1 may turn in an excellent match performance yet and satisfy the gun crank and the combat requirements.

END

COPIES of the Commandant's statement before the Senate Naval Affairs Committee on 6 May 1946 are available in pamphlet form upon written request to the Editor. Never has the role of the Marine Corps been summarized better than in this speech. Although widely quoted and reported in the public press, the Gazette feels that the complete and unedited record of Gen Vandergrift's remarks should be available to all professional marines in a permanent form. Regular subscribers to the Gazette received this reprint with their July issue.



Casualty Assistance Calls

Little known to the average person are the twenty-one aids which are extended to the next of kin of deceased marines

By PFC Robert L. Klaus

Illustrated by Sgt Svend Andersen

"DEEPLY REGRET TO INFORM YOU THAT YOUR SON, SERGEANT JOHN J. DOE, USMCR, DIED 27 SEPTEMBER 1945, IN A MOTOR VEHICLE ACCIDENT AT ENIWETOK ATOLL, MARSHALL ISLANDS. HIS REMAINS WERE BURIED ON JAPTAN ISLAND, ENIWETOK ATOLL. PLEASE ACCEPT MY HEARTFELT SYMPATHY.

A. A. VANDEGRIFT."

THE PARENTS of Sgt Doe received this telegram soon after the death of their son. Within a short time a letter of condolence arrived from the Commandant of the Marine Corps. This letter was followed by another from the Personal Affairs Section, Headquarters, Marine Corps.

This letter stated:

"The Commandant of the Marine Corps has recently written to you expressing his sympathy upon the loss of your son.

"The law provides that as his parents you may be entitled to certain benefits.

"In this respect I should like to inform you that in the near future an officer of the Marine Corps, representing the Commandant, will, if you desire, call on you personally to offer such assistance and information as he may be able to render.

"For your convenience in notifying this officer of your wishes in this matter, a card is enclosed.

"Very sincerely,

"LtCol Robert C. McDermond"

The parents of Sgt John Doe, wishing to know whether they were eligible to receive dependents' pensions, why their allotment was cancelled recently after their son's death, and how they could collect the insurance which their son carried, mailed the addressed card to the designated officer. On the card they stated the day and time it would be convenient for them to receive the officer's call.

This officer, on recruiting or rehabilitation duty in the vicinity of the Does' home, called on Mr and Mrs Doe when he received the card. He informed them of their rights regarding pensions and insurance, explained why their allotment and allowances had been canceled, and apprised them of the benefits local, state, national and Marine Corps facilities provided them.

When he had completed the call, the officer wrote a report to the Personal Affairs Section, giving the results of the interview and requesting any further necessary action. This report is, if need be, the basis on which the Personal Affairs Section takes any necessary action such as the referring of the needy cases to the Navy Relief Society, the American Red Cross, or other similar agencies. It is also used to aid in the speeding-up of payment of gratuities.

The Personal Affairs Section began the study for such a program in May of 1945. At that time most people knew of all the benefits which an ex-marine is entitled to, but few thought of the assistance offered to the families of marines who would never come back from the then still-flaming battle grounds of the Pacific.

The finished outline for the Casualty Assistance Calls Program was approved by the Commandant and went into operation in September, 1945. To date over a thousand such calls have been made by Marine officers.

All this is in direct contrast to the situation which confronted the parents of a marine killed in action prior to September, 1945. At the time the next of kin were often unaware that certain benefits were extended to them.

Benefits offered to the closest relative number about 21. Insurance, cash payments, and pensions are the most important.

Let's take a hypothetical case from start to finish, analyzing the various benefits which it is possible for the next of kin to receive:

Sgt John Blank, USMCR, for sometime missing in action, discovered to be a POW, has been listed as dead from disease.

The Casualty Division, Headquarters Marine Corps, sends a notification to the next of kin, in this case the widow, and to the Commandant of the Marine Corps. A casualty report is drawn up, the Paymaster General is notified to cease payments of allotments and allowances, and two copies of the casualty report are sent to the Personal Affairs Section.

This is when the work of the Casualty Assistance program begins. Personal Affairs locates the address of the widow and tentatively selects the Marine officer most logically situated, geographically, to make the call.

Sgt Blank's file is drawn and a search made for any information which might be helpful to

the officer selected to make the call. Personal Affairs sends a letter to the widow, enclosing a card and pre-addressed envelope to the Marine officer. If the card mailed to the next of kin for their use is not received by the selected officer, he sends a follow up letter again offering his services. If no answer to this letter is received the case is considered closed by the officer and he sends all correspondence and papers pertaining to the case back to Headquarters. However, this does not preclude the next of kin requesting a call at some later date.

IN OUR case the card is returned and the officer visits the widow to explain and clarify the 21 benefits derived from military service.

Mrs Blank, the widow in our hypothetical case, asks the interviewing officer, Maj Jones, how she can ascertain if her husband held any U. S. Government Insurance. Maj Jones says he can institute a check and will do so. He explains further to the widow that this insurance is under the jurisdiction of the Veterans' Administration and that they will notify her if she is the beneficiary.

The widow also asks about National Service Life Insurance. Major Jones makes a note to check this also. He informs Mrs. Blank that if no beneficiary had been designated she is the one legally entitled to payment.

Mrs Blank had followed her husband as far as the West Coast and wishes to return to her home in Michigan. However, she does not have the money necessary for the return. Neither can she obtain the money from her parents. Maj Jones informs her that certain wartime legislation provides that dependents and household goods of personnel may be transported at public expense when the man died in military service, providing that he was in the first four pay grades or was a reservist. Since Sgt Blank was in the Reserves, it is possible for Mrs Blank to move her furniture and goods to her own home at no personal cost.

Maj Jones broaches the subject of emergency maternity and infant care. He tells Mrs Blank that she may receive free medical, nursing, prenatal, and after-childbirth care, since her husband was in one of the four lowest pay grades.

Sometimes pensions, gratuities, and insurance payments are slow in arriving. If Mrs Blank has any financial troubles, she may call on the Navy Relief Society which can advance her money in the form of a loan without interest.

Sgt Blank had a wrist watch which Mrs Blank had given him. The widow wonders if she can get this watch. Maj Jones assures her that every effort is made to forward the personal effects, exclusive of issue articles, in the possession of her husband. Especial care is taken to remove wrist watches, rings, target insignia, money,

photographs, and papers. He tells her that some articles, such as film, are restricted because of the national emergency, but that after such restrictions are lifted, they will be forwarded to her.

Mrs Blank, anxious for the security of her small son, asks the major if she can get a job through civil service. Maj Jones tells her that certain preferences are granted to unmarried widows in connection with examinations, ratings, appointments, and reinstatements in civil service.

Although she is not certain, Mrs Blank thinks that at one time her husband was recommended for the Silver Star. She would like to know if she can get this medal. Maj Jones tactfully explains that sometimes these recommendations are not approved. However, if Sgt Blank was entitled to the Silver Star, this medal would be forwarded to her as soon as possible.

Mrs Blank asks Maj Jones why her allowances had been cancelled soon after she received the news of her husband's death. Maj Jones explains to her that this is government policy, but that she is entitled to payment through the month in which her husband died. Thereafter no payments would be made.

Maj Jones explains further to Mrs Blank that while her husband was missing and a POW that he might have back pay which he never received. If this was the case, the due amount would be determined and sent to her.

ONE of the little known benefits for which the widow in this case is eligible is the death gratuity. Maj Jones tells Mrs Blank that this is an amount equal to six months pay, not including subsistence or rentals, mandatorily payable to the widow when death is not a result of the casualty's own misconduct. Mrs Blank in this case would receive the death gratuity.

If Sgt Blank was employed prior to his enlistment and had received wages of not less than \$50 in each of a required number of calendar quarters since 1936, Mrs Blank may be entitled to Social Security benefits accrued by her husband. In answer to her questions, Maj Jones says that this does not affect her entitlement to her own such benefits when due.

Mrs Blank is also entitled to a dependent's pension until such time as she may remarry. Since she has a child, the amount of the pension would be \$65 a month. The pension is paid by the Veterans' Administration.

Sgt Blank had not paid any Federal Income taxes in the year in which he was killed. If he had, these would have been refunded and further payments cancelled. However, Sgt Blank did owe \$150 in arrears. These arrears are also cancelled, thus saving Mrs Blank the responsibility of paying them.

Had Sgt Blank died in military service within the continental United States, there would be certain burial allowances. These include \$50 to \$100 payments, dependent on cost to government, for defraying the funeral expenses; a government headstone for his grave, if unmarked; and a memorial flag for the purpose of draping the coffin and subsequent presentation to the widow. However, since death took place overseas, this benefit is not applicable in our case.

Should it become necessary, Mrs Blank is eligible for admittance to a Naval hospital for medical and surgical attention.

Maj Jones, having no legal training, cannot offer Mrs. Blank assistance in matters of law. He will, however, if she wishes, contact a reputable local attorney for her assistance.

One benefit not applicable in our case which the next of kin may sometimes receive, is the lump sum payment in the case of certain Naval aviators. This sum, in addition to the death gratuity, may be paid at the rate of \$500 for each year of naval flying since 1939.

Before he leaves Maj Jones asks the widow if she has any special request to make. Mrs Blank timidly says that since her husband has been in the Second Division, she would like to have a history of that Division and a shoulder patch insignia. Maj Jones makes a note of this and promises to send the request to Headquarters where proper attention would be given it.

If Mrs Blank has no questions on any of the subjects which Maj Jones has explained, he

prepares to leave. Before going he impresses on her the importance of keeping Headquarters informed of any change of address. She agrees to this.

Maj Jones returns to his office and writes his report on the interview. He asks that a check be made in the case of the insurance, that a search for Sgt. Blank's personal effects be made, that the Historical Division send to Mrs Blank a shoulder patch and history of the Second Marine Division, and requests that if Sgt Blank is awarded the Silver Star medal that it be sent to his widow.

Maj Jones then calls on one of the local agencies—American Red Cross, Navy Relief Society, Veterans' Administration, Veterans of Foreign Wars, etc.—and requests that they offer their assistance to Mrs Blank should she need it.

This program being carried out by the Marine Corps is a fine gesture and a reciprocal matter. It not only aids the families of men who served it well, but it also garners good will for the Marine Corps.

One man interviewed, himself an ex-Army man, said:

"The Marine Corps really takes care of its men."

One of the most touching tributes paid to the program was given by a young widow of a marine killed overseas. She said, in a letter to the interviewing officer:

"I can see now why Carl was so proud to belong to the Marine Corps." END

Russian Realism

THE GERMANS were so successful in their program of subverting Russian prisoners to the Nazi cause that by the time of the landings in Southern France, fully one-third of the prisoners taken by the American Seventh Army were formerly soldiers in the Communist armies. The disposal of these "Russians" was a ticklish problem. Were they bona fide POW's or should they be treated as deserters from the Red Army? The American authorities were happy to place them under the charge of Russian liaison officers, and later, when shipping was available they were returned to Russia via the Mediterranean. Some Americans wondered what became of them. In reply to a rather hesitant question, a Russian major in charge of one of the "prison" camps replied:

The privates, as you call them, do not know any better. We delouse them, send them to Russia, and put a Russian uniform on them. Then we send them back to the front, this time on our side.

"And the non-commissioned officers?" he was asked.

"We make them privates and send them to the front."

"And the officers?"

"They know better," the Russian major stated flatly. "We take them back too, so as not to embarrass the too-tender feelings of our Allies. When they get to Russia we shoot them."—from *We Caught Spies*, see page 5.

In Brief...

Protective cloth designed to stop a bullet has been developed by the Army for infantrymen, according to Gen Jacob L. Devers. Gen Devers predicted the cloth would save many casualties, especially those caused by glancing shell fragments. Other Army officials proclaimed it a step beyond metallic body armor used by airmen during the war.

Navy officials recently unveiled "Moby Dick," "the newest, most powerful rocket motor, delivering 66,000 pounds of thrust every two seconds." Designed to take the place of 12-inch, 1300-pounder "Tiny Tim," the "Moby Dick" is 150 inches long, 17 inches in diameter, weighs 5800 pounds. Speed, as yet unannounced, is over 900 feet per second.

Helmets, suits, mittens, and boots lined with a cottonlike batting made from thousands of glass fibres have been developed by the Navy. The uniform has glass lining combined with rubber-coated nylon, retains more body heat, and weighs less than present gear. Especially suited for cold, wet weather, entire outfit is donned in half-minute.

Final Service Record Book average proficiency marks necessary for enlisted men to receive an honorable discharge have been reduced from 3.8 to 3.44. This order, retroactive to 1 March 1946, permits former marines who failed to receive honorable discharges solely because of low marks to apply for new certificates.

One of the war's biggest mysteries may be the whereabouts of 2,500,000 Japs supposedly in Russian-held territory at the war's end. Jap figures place the numbers at 1,000,000 civilians; 700,000 military in Manchuria; 607,000 total in North Korea Sakhalin. No information has come from Russian, Chinese, or other sources, Allied Headquarters said.

If the next of kin desires, bodies of service men and civilian workers may be returned to the States, under new legislation. When returned, burial will take place in national or private grounds. Cost of return and final burial, paid by government is estimated between \$105,000,000 and \$215,000,000. Number to be returned: approximately 30,000.

Service in the National Guard before the age of 18 may now be counted in computing service for longevity. This policy, retroactive to 1 June 1942, will be in effect until six months after the war has been officially declared terminated. Disbursing officers will adjust accounts for check-ages subsequent to the Alnav and credit prior service.

There were only 19 recruiting stations in use by the Marine Corps as late as September, 1899. These stations were located as follows: four in Massachusetts; three, New York; two, New Jersey; five, Pennsylvania; one, Delaware; one, Maryland; three, California. Five officers were in key cities, and NCOs were in charge of the remaining stations.

Engineer courses at Camp Lejeune are open to all officers and enlisted men. These courses include: for officers, the Engineer Officer—ten months; NCOs, the NCO General Engineer, the NCO Engineer, and the NCO Utilities—six months each; privates, Basic Engineer—eight weeks. Enlisted men must have two years left on current cruise.

American Defense, Area Campaign, and Victory Medals will not be ready for distribution to Marine personnel until late in 1946. Requests for these medals will not be accepted until a sufficient supply is ready for distribution, and persons who have applied must resubmit applications when announcement of sufficient quantity is made.

Several modifications in officers' dress uniforms have been made recently. At a date after 30 June 1947, the sword will be reinstated; the webbed, khaki shoulder sling will be adopted in lieu of the abolished Sam Browne; the dress blue coat will have a 2-inch, vertical slit, equipped with zipper, over the left hip, so that the sling may be worn under the coat.

Public Law 347 now provides that officers who at the time of their appointment in the regular service had accrued leave which they had not taken, may be granted that leave without the loss of pay or allowances entailed heretofore. Formerly such leave would have been canceled as of the date of separation.

Giant aircraft carriers are turned by the thrust of airplane engines in new method, "Operation Pinwheel." Planes on the starboard bow will pull to the left, while those on port quarter pull to right, causing the ship to pivot. First used on Guam, this method is useful when there is heavy harbor traffic, lack of tugs, and presence of shoals.



U. S. Marines profited more than the British from lessons learned at Gallipoli.

Amphibious Tactics

Continued from page 28

scene of the maneuvers, and in 1924, exercises were held in Maryland. It was hoped that the training periods ashore in 1921 and 1922 could be followed by participation in fleet maneuvers at sea but this was not possible.

The employment of aviation in landing exercises began after the war and Marine aviation elements which were committed to action with overseas expeditionary forces were able to pioneer in combat operations many techniques which are now standard. In 1919, a mixed squadron of land and sea planes operated with the expeditionary brigade in Haiti and a flight of six land planes operated with the brigade in Santo Domingo. The following missions were performed in support of operations against the guerrillas: strafing and bombing, reconnaissance, photograph and map making, support of ground troops, and transporting of passengers and mail. As early as 1922, Marine aviation flew ambulance planes for evacuating sick and wounded from the front lines to base hospitals in the rear. This early experience was increased in the extensive operations in Nicaragua during the next decade.

Between 9 January and 25 April, 1922, the 5th Marine Regiment, reinforced with engineer, mine, and machine gun detachments, participated in fleet maneuvers with the Control Force of the Atlantic Fleet. The problems included the attack and defense of Guantanamo Bay and Culebra.

In March, 1923, a consolidated Fleet Marine Detachment conducted a landing exercise at Panama, and in the summer a battalion of marines and sailors from the vessels of the Scouting Force practiced a landing on Cape Cod, employing naval gunfire and smoke. Again in January and February 1924, the 5th Marines, commanded by Col Dion Williams, USMC, embarked at Quantico on the Marine transport *Henderson* and participated in US Fleet Problem No 3 at Panama and subsequently Fleet Problem No 4 at Culebra. In the first problem, the marines, part of a fleet defending the Canal against passage by hostile naval forces, landed and attacked Forts Randolph and Coco Solo, which were defended by Army detachments, and destroyed the locks. In Problem No 4, the infantry elements of the 5th Marines landed in the assault against defending artillery detachments at Culebra. During these maneuvers, signal, chemical, tank, artillery, and aviation elements received valuable training in the field. Two special types of boats were experimented with in the landings and the results, according to the report of the Commandant of the Marine Corps, were: "Interesting although not decisive."

One interesting experimental vehicle tested during this exercise was the Christie Amphibian Tank. Powered by wheels, tracks, or twin-screw propellers, this versatile machine developed speeds of 35 mph on wheels, 15 mph with tracks, and 8 mph in the water. However, it demonstrated a singular lack of seaworthiness. Prior to loading aboard ship for the maneuvers, careful measurements were made of cargo holds and



1924—on annual fleet maneuvers, U. S. Marines swam ashore at Culebra, Cuba.

diagrams were drawn to facilitate loading by troop officers. At this early date the beginnings of our later transport quartermaster functions were already in evidence. In unloading transports at Culebra, effective use was made of pontoon bridges as temporary docks and lighters for heavy equipment—a practice perfected twenty years later in the combat operations of the war.

THE 7th Marines were organized at San Diego in 1924 as a nucleus of the West Coast Expeditionary Force. In the spring of 1925, 1,500 marines from the East and West Coast Forces, staffed and commanded by officers from Headquarters, Marine Corps, participated in a joint Army-Navy exercise in the Hawaiian Area. Detailed plans and annexes were drawn up and a successful assault landing was conducted against Oahu with the limited actual force representing a constructive one twenty times its size. It is noteworthy that the scheme of operations was based on the Gallipoli Campaign. One of the important results of this maneuver was the recognition of a need for special landing boats and self-propelled artillery lighters. Ships' boats were unsatisfactory. Recommendations were also made for more air power in landing operations, for lighter and better communication equipment, and for a standardized procedure for ship-to-shore and landing operations.

During the next five years, expeditionary duty in China and Nicaragua so reduced the Marine Corps as to prevent participation in fleet exercises. However, a course in landing opera-

tions tactics was begun in the field officers' course at the Marine Corps Schools in 1927, and in 1929 the Commandant of the Marine Corps convened a board to make extensive tests of landing craft. In December 1931, a provisional battalion of marines reinforced with a battery of artillery was embarked on the *Wyoming* and *Arkansas* and conducted extensive maneuvers in Atlantic, Pacific, and Caribbean waters. In February 1932 a regimental headquarters, an infantry battalion, and an artillery battalion again took part in joint exercises in Hawaii. In 1933, there were again no units available for extensive landing exercises.

The Joint Board as early as 1923 had declared: "The most important function of the Marine Corps is to seize and hold temporary advanced bases in cooperation with the Fleet and to defend such bases until relieved by the Army." In the fall of 1932, the 7th Marine Regiment, stationed in Quantico under Col Charles H. Lyman, organized a battalion landing force which was ordered to duty on the *Wyoming* and sent to Cuban waters. This battalion remained on the *Wyoming* for several months and in March was transferred to the *Antares*. It was landed at Fort Everglades, Florida, where it continued landing force training.

The Commandant of the Marine Corps, in the autumn of 1933, recommended to the Chief of Naval Operations that the expeditionary force be designated Fleet Marine Force. This title was approved and the Fleet Marine Force was officially established on 8 December 1933 in

accordance with Navy Department General Order #241, which was based on the recommendations submitted by the Commandant of the Marine Corps.

THE order directed the Commandant to maintain an organization to be designated Fleet Marine Force, in a state of readiness for operations with the fleet. The Fleet Marine Force was to constitute a part of the regular organization of the United States Fleet, and to be included in the Annual Operating Force Plan. It was placed under the direct operational control of the Commander-in-Chief and held available for operations with the fleet or for exercises afloat or ashore in connection with fleet problems. For the first time there was a permanent organization continuously available under direct naval control for the study and practice of amphibious warfare. The force initially organized consisted of 3,000 men and contained one full strength infantry regiment, one skeletonized infantry regiment, one battery of 155mm guns, two batteries of 75 mm pack howitzers, one battery of 50 calibre machine guns and Aircraft One and Two. The units were stationed on the east and west coasts with the major elements at Quantico, Virginia. No personnel was available for the formation of the units contemplated. These included two full regiments of infantry, three battalions of light artillery, two battalions of six-inch guns, and four batteries of antiaircraft artillery. The lack of personnel continued to handicap the training mission of the Fleet Marine Force for almost seven years. A reinforced battalion participated in landing exercises on the West Coast in February 1934, and in April, units of the Fleet Marine Force from both coasts under the command of BrigGen C. H. Lyman, USMC, embarked on the *Charmont*, *Antares*, and *Holland* for participation in a joint fleet exercise in the Caribbean.

The Fleet Marine Force was born in the U.S. Navy as a result of the interest maintained and developed by the Marine Corps in landing operation tactics for over thirty years. In the ten years following its inception, the Fleet Marine Force succeeded in so spreading its knowledge and influence throughout the naval and military services that by 1942 we were able to open a full scale amphibious offensive.

The Navy doctrine for landing operations which has governed the conduct of all of our amphibious campaign from Guadalcanal to Okinawa was first conceived in 1934. Although the first landing operations manual has been revised repeatedly in the last ten years, the major principles originally set forth remain sound today.

IN OCTOBER 1934, the Commandant of the Marine Corps directed that a board be convened at the Marine Corps Schools to prepare a

tentative landing operations manual. Close cooperation was maintained by the board in the preparation of the doctrine with the Commanding General and staff of the Fleet Marine Force, with Marine Corps Headquarters, and with experienced officers throughout the Naval Service.

In 1934, there were already in existence two types of directives which pertained to amphibious operations. One of these was the Navy manual which for over thirty years had governed the organization, drill, and employment of provisional landing forces, organized, when necessary, by separate vessels and units of the fleet from the sailors and marines available in the ships' regular complements. This landing force manual contained detailed instructions on formations and drills but little tactical information on ship-to-shore operations. The other type of directive evolved as a result of the recognition, which had existed in the Army and Navy since before the First World War, that there were certain operations wherein military and naval functions overlapped and where there was a need for coordinated action. In May of 1916, a conference was convened at the Naval War College to consider the problems of cooperation between the Army and the Navy. The attendance of Army officers was unfortunately limited and the discussions undertaken were of a preliminary and general nature. The two types of operations wherein cooperation was considered necessary were those involving coast defense and joint overseas operations. No decisive conclusions were drawn in this War College discussion. However, the conference recommended the formation of a permanent joint board as an instrument of continuous strategical cooperation. Such a board was established in 1919 and between 1919 and 1934, the Joint Board promulgated several manuals and pamphlets, prescribing methods for Army and Navy cooperation in joint overseas expeditions. The latest had been published in 1933. These directives were primarily concerned with the techniques and agencies for cooperation and with the respective functions of each service in the conduct of joint operations. They established two methods for joint action: mutual cooperation under separate commands between the military and naval forces involved in an operation and coordination of the two under a unified command. The concept of unity of command is based on the principle of paramount interest. Under this principle, the commander of the service whose function and requirements are of the greater importance at the time of the operation is given the authority and responsibility for the overall conduct of the entire mission. Unity of command vests in the commander of one service the authority to coordinate the operations of the participating forces of both services by the organization of task forces, the assignment

of missions, the designation of objectives and the exercise of such coordinated control as he considers necessary to insure the success of the undertaking. Unity of command does not contemplate control of the administration or discipline of the forces of another service, except if absolutely necessary and then only through the regular chain of command. It does not call for instructions beyond those absolutely necessary for effective coordination.

THE tentative manual prepared by the Marine Corps Schools in 1934 was maintained in effect in the Navy for over three years. In 1938 it was revised and published as the official landing operations doctrine. It was written for the Fleet Marine Force rather than for joint forces and the reinforced Marine division was taken as the basic element of the landing force organization. Since the Fleet Marine Force was an organic part of the Navy, there was no problem of unified command. The harmony and mutual understanding that existed between the Fleet Marine Force and the other fleet elements in the amphibious training of the next ten years facilitated the practice of the tactics prescribed in the manual and the unimpeded development of supplementary special techniques and equipment. New landing craft, shore bombardment techniques, joint communication methods, and other aspects of amphibious tactics were developed around the framework of the manual. Although written for naval landing forces employed to seize advance bases for the fleet, the principles which it contained and the techniques developed in later training have been successfully applied to joint operations.

The publication of the doctrine brought about for the first time a standardization of policy, method, and terminology and gave direction and basis to the study and continuous development of amphibious tactics in the naval service. The manual discussed the peculiar characteristics of landing operations, their problems, purpose, and various types, the forces necessary for conducting them, the respective missions of the landing force and the naval attack force, and the phases of an amphibious attack. It set forth in detail techniques for coordinated planning, organization, training, embarkation, command relations,

control and communications, logistical support, air and naval gunfire support, the employment of field artillery, tanks, engineer, and smoke. It covered the choice of landing areas and frontages, timing, the characteristics and employment of landing craft, and all aspects of a coordinated landing and continued attack ashore.

BY 1935, the thought which had been devoted to landing operations since the last war had crystallized. An organization had been established on a permanent basis and standard tactics had been adopted with which to train it. This was by no means the end of the development; the principles established in the doctrine allowed ample latitude for continued development and revision in accordance with the lessons learned in actual landing exercises and with technical developments in weapons and equipment. The doctrine, however, recognized all the essential problems and offered generally satisfactory solutions to them. It showed how superiority of force must be gained in planning, organizing, training, and with an accurate volume of gunfire and aerial bombardment; how speed, timing, and coordination must be achieved in executing a landing, and how the continuation of shore operations by the landing force must be closely supported tactically as well as logistically by the naval attack force. The practical application of the tactics in the five years of fleet maneuvers that followed brought forth supplementary techniques which served to increase the coordination and effectiveness of the combined components of the attack force.

Fleet maneuvers involving landing operations by the Fleet Marine Force were conducted in both the Atlantic and Pacific each year. The fleet landing exercises in which elements of the Atlantic Fleet and the First Marine Brigade participated, held usually at Culebra, were considered the more important. However, the participation of the Second Marine Brigade in fleet problems and minor landing exercises at San Clements closely paralleled the exercises in the Atlantic and served to give experience and to increase the proficiency in amphibious tactics of the West Coast units of the Fleet Marine Force as well as the participating elements of the Pacific Fleet.

To Be Continued

A SURVEY of underground sites throughout the nation which might be used for long-term storage of machine tools and war production equipment and which, if necessary, may be adaptable in war-time for vital industrial production and other military purposes has been undertaken by the Army and Navy Munitions Board, which is charged with formulating plans for the industrial mobilization of the country in the event of an emergency. Having no present intention of recommending the placement of any industries underground, it is the primary purpose of this survey to locate underground sites suitable for the safe and economical storage of the many vital items of machine tools and mechanical equipment owned by the government which would otherwise require extensive surface storage facilities.

Flying the Flak

Continued from page 19

sky with so many attacking aircraft, coming in from all directions, that concentration of fire was impossible.

It was a story of continually changing tactics. When too much enemy steel ripped into the American planes new offensive approaches had to be developed. Stereotyped attacks were avoided. Enemy gunners were kept guessing for the pushover point, the number one spot for a barrage. Successive flights were urged not to use the same pushover points from which preceding flights initiated their dives.

In the early pre-war training tactics, dive bomber squadrons approached their objectives, echeloned away from their target. Often a flight made a quarter circle around their target before peeling off into the dive. This echelonment and circling was exactly what the defensive gun crews would have needed to guess the target and direction of the attack.

THE ancient system of peeloff, which was a wingover away from the echelon, had the planes in an almost stalling attitude at the top, an extremely vulnerable position.

So, early in the war came the approach to the dive without changing from the cruising formation. This formation could have been a V of V's, a diamond, or a column of V's. The final approach was planned in advance, and the attackers neared the target area several thousand feet above their pushover altitude, using the sun and clouds to achieve surprise.

This permitted a fast letdown in the final approach. The increasing rate of speed threw the heavy antiaircraft trackers off calibration. A weave kept the target undefined and made it difficult to bring the guns to bear upon the planes. Furthermore, the changing altitude, unnoticeable from the ground made time settings on the fuses inaccurate.

To solve the altitude problem the Japanese often had patrol planes around the target area. They made no attempt to interfere with the attack, but they radioed fuse setting data to the ground crews.

Antiaircraft experts know that if an airborne target changes its altitude, direction, and speed every six or eight seconds, it is impossible for the heavy antiaircraft fire directors to maintain an accurate track of it.

The dive, in which the planes bore straight down at the target, and the pull-out which was usually at low altitude in range of almost every weapon the enemy had, were the most vulner-

able points in the bombing, rocket, or strafing runs.

A bomber was more vulnerable than a fighter in this respect, because its bomb did not affect the target until the plane had pulled out. Fighters came in shooting rockets or throwing .50 calibre ammunition from four to six guns and they had the antiaircraft crews ducking for cover.

Their vulnerability lay in the fact that most of their attacks were shallower and lower, and thus they were good targets for defense weapons not in the direct line of attack. A plane in a glide was more easily shot at by ground crews than one in a dive, and if the glide was too flat its tendency was to be too slow.

Where pinpoint strafing was possible instead of general spraying of an area, fighters found it convenient to make steep high angle runs and higher pullouts, with a resulting increase, in safety.

LtCol L. A. Christoffersen, commanding officer of VMSB 133 in the Solomons and the Philippines from September 1944 to March 1945, said it was safer to attack the weapon itself than a target near the weapon.

"Furthermore diving over a weapon is usually safer, because it is more difficult for the weapon to shoot straight up, such as at a dive bomber, than at a fighter or torpedo bomber which may bear down in a fairly shallow glide and also a lot lower," he added.

The Japanese antiaircraft guns had a five to ten degree blind spot directly above them.

When an attacking plane passed directly overhead, time was required to turn the gun from the plane's approach to its retirement.

Thus came the rule of thumb, "Choose the approach so that the airplane dives over the heaviest concentration of guns and retires directly away from them."

THERE were two differing theories on the safest getaway. Frequently, the fast, powerful fighters, which were hit more often while diving very low in their strafing runs, were advised to pull up to three or four thousand feet and then to go into their evasive action from there.

But the dive bombers and torpedo bombers did not have the power to carry their heavy weight in such a pull-up without losing valuable speed. Any undamaged guns could have continued to fire at them with very little deflection.

Furthermore, the dive bombers usually pulled out of their dives higher than the low strafing fighters and gliding torpedo bombers.

Level flight between 1,000 and 3,000 feet was considered the most dangerous. So, the bombers, after dropping their lethal cargoes, found



Grumman Avenger torpedo bomber (TBF) at Bougainville—their slow, gliding approach made them vulnerable targets for Japanese small calibre automatic AA fire.

that a gradual high speed letdown, reaching tree top level outside the perimeter of defense was the safest doctrine.

They also resorted to jinking—a series of violent evasive maneuvers—and they headed seaward as fast as they could go.

Later, even excessive jinking was discouraged for the sake of more lateral distance between the planes and the guns—and speed.

The Japanese countered by placing guns on high positions to shoot at the retreating planes roaring out to sea. If the planes let down too low the guns were able to direct their fire by the splashes their missiles made in the water.

To neutralize the smaller automatic fire as much as possible before the dive bombers and torpedo bombers went in to knock out the heavier emplacements, fuel or oil dumps, or other military installations, the fighters were frequently sent in first.

"Preliminary strafing cut the volume of defending fire by as much as 40 per cent, but of course the conditions varied," Maj Prosser believed.

The Japanese gunnery officer, LtComdr Yunoki, said, "We lost about 200 men on anti-aircraft guns from strafing, between February and June 1943 (on Munda). It was difficult to maintain anti-aircraft gun crew discipline."

THUS was developed the coordinated attack. Wherever possible, the planes approached the target from all sides. The fighters pushed over from one side, each plane intent on wiping out one or more predesignated automatic weapons. Speed and close timing were essential.

As the last fighter section was pushing over, the dive bombers went in from the opposite side of the target. In as rapid succession as possible, they bore down upon their targets in 70 degree dives, spaced laterally in an inverted cone, each plane diving toward the objective from a slightly different direction.

On the tail of the last plane other bombers swooped in fast from other directions, and the result was an overwhelming swarm of fighters and bombers descending upon the target at very close pre-determined intervals and from almost all directions.

This type of attack confused the antiaircraft gunners and deconcentrated their fire. The barrage type of fire was not as effective against this type of attack as against a column dive in which all planes dove at the target from the same push-over point and in the same direction.

The column dive versus the around-the-clock dive was argued pro and con throughout the war.

Except in attacks which were channelized by necessity, such as in close support strikes against enemy personnel and pillboxes near friendly infantry, down valleys, or where the retirement course was necessarily out to sea, the weight of favor lay with the around-the-clock attack.

"The speed and maneuverability of the Corsair in a simultaneous striking line abreast attack appear to be our greatest assets," said Maj Hansen and Maj Mobley of the *Bennington*.

The navy squadrons operating aboard the *Hornet* in the Central Luzon operation in November of 1944 also advised that attacks be executed at high speed and from as many directions and altitudes as possible.

"The danger of midair collisions with planes diving from every direction and altitude is much to be preferred to the almost certain damage to be received from the intense if not too accurate AA," the *Hornet's* action report stated.

Speed became one of the principle requirements of military planes. Speed as well as bomb carrying capacity.

The fast fighters, such as the Corsair, were built to carry heavy bomb loads, so the versatile fighter-bombers came into being. It was a plane which could deliver destructive force by rocket and dive bombing attacks, and yet which could be used as a fighter plane. It meant the end of dive bombers.

Rockets, themselves, helped write "finis" to the not-too-accurate science of dive bombing. With rockets, a fighter pilot could score pin point bulls eyes with projectiles of the size shot from the Navy's 12 inch guns and carrying 500 pounds of explosive per rocket.

In fact, a salvo of eight five inch rockets from a plane was equal to a salvo from a destroyer.

Huge and heavy, but rugged, the Marine torpedo bombers were intended for antishipping and antisubmarine work. But, they made most of their strikes against enemy installations, blasting runways, barracks, supply dumps and even gun emplacements.

Their tremendous bomb carrying capacity made them so practicable in horizontal and glide bombing that at the war's end the Marine CVE's each had 12 TBM's as well as their 18 fighters.

By using simultaneous fan attacks they made effective low level bombing strikes against enemy shipping. They could even strafe, having two .50 calibre guns firing forward as well as the .50 calibre gun in the turret and the .30 in the tail. Carrying rockets they were used in coordination with Corsairs in striking pin point targets.

One of the toughest assignments they had, however, was mine laying in heavily defended harbors, flying low, slow, and down the center of the enemy's harbor defenses. When VMTB-233 sowed aerial mines across the entrance of Simpson harbor in the Jap's stronghold of Rabaul in February 1944, they lost six planes of the 23 that made the sweep.

In spite of this, when the last plane of the strike was unable to release its mine, the pilot, Lt Byron Radcliffe, and his two crewmen, after a quick vote, returned all alone to make another run to finish their assigned job.

During the last year of the war the Avengers topped all Marine planes in the percentage of times hit (6.31%) and the total Marine and Navy TBM's loss was 272 out of 17,021 sorties (1.5%).

Most of the Marines' fast low level work was done by twin-engine PBJ's (Mitchells). They were used in coordinated attacks, delivering the low body blow with delayed action bombs while the enemy guns were still firing at the retiring fighters, dive bombers, and torpedo bombers that swooped down out of the skies in the opening assault.

Hitting the target suddenly, apparently out of nowhere, their chief defense was surprise. In the swiftness of their attack and their low altitude, coming in at treetop level, they flashed across the enemy gun sights before they could draw much fire. Most of their work was skip bombing or firing rockets at shipping targets at night, frequently by means of radar.

MARINE Aviation did not make extensive use of the other types of planes in combat. Their only use for the four engine Liberator was in photography work (they took the first pictures of Truk). For awhile they used twin engine PV's (Venturas) in night fighting work until they got the sleek and speedy twin engine Tiger-cat at the close of the war to double as both day and night fighter.

Probably shot at by more small arms and machine gun fire, and thrown at with more grenades than any plane in Marine Corps history were the low-flying, slow OY's, commonly known as "Grasshopper" observation planes.

Frequently operating far behind the enemy lines only 50 feet above the ground, these artillery spotters rarely returned to their bases without bullet holes in their fabric. Often they pancaked on their small field, shot up so badly that they had to be junked as soon as they landed.

Nevertheless in 2,271 missions in Saipan, Peleliu, and Okinawa by planes from VMO-3, VMO-4, and VMO-6 only six "Grasshoppers" were lost to enemy fire and failed to return. Furthermore, in only four cases were the returning pilot or observer wounded.

An example was 1stLt Robert C. Jackson of Webster Grove, Missouri, flying in VMO-3 at Okinawa. On his first mission his stabilizers were damaged. A week later his aerial was knocked off. Four days later Japanese machine gun fire chewed up his tail. He got a hole through his gas tank the following week. During the next seven days he was hit twice. Finally he was wounded, but after a rest he started flying again.

In spite of all its shooting the Japanese were not able to stop Marine and Naval aviation. The tactical skull sessions go on. New trick plays must be worked out for the jet and rocket planes being developed to carry atomic projectiles. To throttle back in anything as fast moving as military aviation could mean a disastrous spin. **END**

military digest



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Strategy of Fear

By *Herbert Rosinski*

THE revelations of the Nurnberg trials, of the Pearl Harbor Committee and of individual Japanese leaders like Prince Konoye have made clear many of the political considerations that led the Japanese military leaders in the autumn of 1941 to take over the leadership of their country and to unleash the Pacific War. But these revelations have failed so far to link up that political decision with its *strategic* foundations. How did the Japanese militarists expect to wage, and to win, that war? By what means could a country so poor in every respect—in basic resources, in industrial potential, even in manpower—hope to defy successfully the combined might of the two greatest naval and industrial powers of the world?

That question is the heart of the Pacific War. It is the key to the entire Japanese strategy, the explanation of its many seeming inconsistencies. In order to understand it, is necessary to go back beyond the discussions of that tense autumn of 1941, to Japan's former wars against China and Russia. For it was the experiences of these wars, which, transposed into modern conditions and weapons, formed the bases for that fateful decision, and for Japan's conduct of the war.

The secret of the success of Japanese military leaders both in 1895 and 1904-05 was their ability to utilize superior seapower in order to restrict an "unlimited conflict," which they knew they could not have withstood, into a "limited

war" adapted to their strictly circumscribed forces. Both in 1895 and in 1904-05 they early established complete naval superiority in order to overwhelm their limited territorial objectives. Once on their objective they challenged their opponents to come and oust them. In both instances their opponents saw themselves faced with a dismal prospect; they might, at the price of exorbitant exertions, succeed in pressing back the Japanese on land, but owing to the temporary elimination of their naval forces, they could never hope to pursue that dearly bought success to complete victory across the sea. Thus it is not surprising that first China and then Russia preferred a "negotiated peace" to the continuation of a game that at best could only end in a draw.

So strictly circumscribed were the Japanese forces, however, that even these "limited wars" proved almost too much for them.

The conditions which had determined Japan's strategy in 1895 and 1904-05 continued to determine it in 1941.

In the thirty-six years since her war with Russia, Japan had achieved a vast expansion of her military and economic strength. Yet, her fundamental weaknesses had not been eradicated. Her main source of strength, her manpower, was still absorbed to an inordinate extent by uneconomic methods of agricultural and industrial production. Her industrial capacity, although feverishly expanded, had still hardly reached the level of a minor industrial power like Belgium. More-



Naval Air Station, Pearl Harbor, looked like this after the Jap sneak attack.

over, the expansion of her industrial potential merely served to accentuate her dependency upon outside sources for most of her strategic raw materials: oil, iron ore, scrap, tin, chromite, and rubber.

MEANWHILE, the "Chinese incident," so rashly begun four years earlier at the Marco Polo Bridge near Peiping, had led Japanese policy into an impasse. By the summer of 1941 even the leaders of the Army had been forced to the conclusion that the war against the Chinese National Government in Chungking had bogged down.

This exceedingly tense political-military situation was still further intensified, when a few months later, in July, 1941, the USA, followed by Britain and the Netherlands, imposed upon Japan a financial and economic embargo. Together with the military impasse in China it placed the Japanese leaders in a position in which they could see themselves forced to choose one of three alternatives within a measurable period of time.

1. Either to break off their war of aggression in China and Indo-China and come to an arrangement with the Anglo-Saxon democracies—the line which Prince Konoye apparently tried to pursue up to the middle of October.

2. Or to persuade the United States Government by the threat of "something terrible" to lift the embargo without any Japanese commitment to terminate the "China incident"—the purpose of the Kurusu mission to Washington.

3. Or finally, to break simultaneously both the military and the economic stranglehold by open force.

The third alternative meant war against the United States, an undertaking more formidable even than had been the challenge to China in 1895 and to Russia in 1904-05. So tremendous was the prospect that, in contrast to the Army, which professed its ability to overrun Southeast Asia in two to three months, the Navy leaders for a long time appear to have been reluctant to envisage such a struggle, although the expansion into the "South Seas" was the traditional naval line. However, Adm Yamamoto, the energetic commander of the Japanese combined fleets, had instituted from January 1941 onward an inquiry into the ways and means for reducing that seemingly impossible undertaking to manageable proportions. Out of these investigations emerged a plan, which, tested first in fleet maneuvers in August, 1941 and subsequently in a gigantic war game in Tokyo from September 2 to 13, was finally adopted by both the Navy and Army chiefs.

ESENTIALLY this war plan was nothing but the reapplication of the strategy of a "limited war" to the new situation, and to the new weapons which had emerged since that time. Just as in those earlier conflicts the Japanese strategists had wisely refrained from any attempt to aim at an all-out victory beyond their means, and restricted their efforts to the isolation, occupation and defense of a limited strategic objective, so Yamamoto's plan renounced from the outset any hope of inflicting a decisive defeat upon Japan's opponents and restricted itself sharply to one limited objective; the isolation and overrunning of Southeast Asia. Provided that she did not let herself be drawn into unlimited adventures and



Tied to the docks, *USS Helena* (left) was hit by torpedoes but downed six Japs.

husbanded her forces carefully she would have a good prospect of frustrating her enemies' inevitable counterattacks and by wearing them out convince them once again to accept the *fait accompli*.

The essential part of this war plan was the conquest of Borneo, Java, Sumatra, Malaya and Burma. The conquest of the Philippines was not to the same degree absolutely essential. Economically, the Philippines had little to add to the oil, iron ores, tin, and rubber of the "South Sea Territories." From the broader political point of view there would have been in fact every reason for going to the extreme to avoid anything that could contribute to bringing the United States into the conflict. But Yamamoto and his collaborators did not see it in that light. To them the intervention of the United States was a foregone conclusion and the only "realistic" policy was to nip certain intervention in the bud by temporarily crippling the U. S. with a surprise attack on her Pacific bases and naval forces.

THE question of invading the Hawaiian Islands was raised, but decided against on subordinate technical grounds. This decision, for which the Japs have been held up to so much scorn and ridicule, reveals itself as entirely consistent, in view of their fundamental conception of a "limited war." Their main attention was directed to the south. The inclusion of the attack upon the Pacific Fleet had already strained their plans and resources to the limit. For the purpose of keeping the United States from intervening during the first critical six months a crippling blow at the Pacific Fleet was enough.

The Japanese plan of operations, between the

main drive to the "South Seas" on the one side and the "protective stroke" at the Pacific Fleet in Pearl Harbor on the other, was still further intensified by the necessity of coordinating it with the Kurusu mission to Washington.

THE greatest difficulty of all, however, was the coordination of the surprise attack against Pearl Harbor with the launching of the operation against Malaya at the other end of the 5,000-mile arc spanned by the Japanese plan of operations. To the eyes of the Japanese strategists, this second major blow, designed to dominate Singapore, isolate the Netherlands East Indies from the west, and form a flank against the Indian Ocean, was no less important than the blow at the Pacific Fleet. So impressed were they with the necessity for the utmost speed in carrying it through that they decided to launch it simultaneously with the attack against Pearl Harbor.

Even more grave was the fact that in launching simultaneous attacks they were forced to disclose prematurely at least part of their plans and thus endanger the surprise effect upon which they were counting so heavily to offset their limited forces. For, unlike the attacks against Pearl Harbor, Midway, Wake, and Guam, the launching of a large armada of transports and warships from Hainan could not possibly escape observation in the comparatively narrow waters of the South China Sea. All they could do was to seek to deceive the Allies as to its destination by first directing it against Bangkok and then midway changing its course against Northern Malaya. While this oversubtle stratagem failed, the premature disclosure that something was afoot paid off by concentrating the attention of

the Allied strategists still further upon Southeast Asia and thus contributing to make the surprise at Pearl Harbor even more complete.

The task of the Japanese force destined for Malaya was further complicated by the arrival in Singapore, at about the same time that the Japanese set out from Hainan, of Adm Sir Tom Phillips with the two battleships, *Prince of Wales* and *Repulse*. Two older battleships, *Revenge* and *Royal Sovereign*, were following. To crush this powerful opponent the Japanese strategists had an overwhelming force of their own. But before it could go into action, Adm Phillips' two battleships had already been caught and sunk by Japanese naval flyers.

WITH the sinking of the *Prince of Wales* and of the *Repulse*, the Japanese strategists had dominated the only remaining force of capital ships which, after the immobilization of the U. S. Pacific Fleet at Pearl Harbor, could still have seriously interfered with their operations. Yet, even this absolute superiority could not induce the Japanese to relax for a moment the extreme circumspection with which, despite the apparent recklessness of their moves, they were carrying through their plans. Thus even after the temporary elimination of the Allied capital ships the Japanese strategists were not willing to expose their own to any avoidable risks from Allied submarines and planes, but kept them well to the rear, preferring to overwhelm the weak Allied forces still opposing them with more easily replaceable forces: light naval units, transports, land, and air forces.

By neutralizing and isolating one Allied position after the other from the air before launching their vulnerable transports under the protection of strong escort forces, the Japanese were able to drive forward rapidly from one key point to the other without ever offering the Allied commanders an opening for a really crippling counterstroke.

The surrender of Bataan (April 8) and Corregidor (May 6) marked the final "reduction into possession" of the entire "strategic objective" isolated by the twin blows of Pearl Harbor and Kuantan.

Even before the conclusion of the struggle for the Philippines, the breakdown of Allied resistance in the South Pacific had placed before the Japanese strategists the most vital decision that was to confront them in the entire course of the war: whether or not to push on into the Indian Ocean.

The resistance of the Allies in Malaya and the Netherlands East Indies had given the British authorities in India a few invaluable weeks in which to strengthen their defenses.

After the fall of Singapore, Sumatra and Java, all available resources had been concentrated

upon the task of strengthening Ceylon, now the key to the Allied strategic position in the Indian Ocean. By the end of March the island was considered reasonably secure, but the naval forces available were woefully weak. It was not a force with which to oppose the Japanese strategists, if they should choose to move into the Indian Ocean in strength. They did strike early in April and with forces far superior to those anticipated; three battleships and no less than five carriers were in the force.

The Japanese strategists completely failed to follow up the opportunities presented them in the Indian Ocean. After meeting with rebuffs in their air raids against Colombo and Trincomalee, in Ceylon, they contented themselves with sinking the cruisers, *Cornwall* and *Dorsetshire*, the old carrier, *Hermes*, and some hundred thousand tons of shipping, and withdrew to their bases without seeking either to land on Ceylon or to follow Adm Somerville. Yet during those anxious summer months of 1942 the fate of the war lay in the Indian Ocean.

THE entire global strategy of the Allies stood or fell with their ability to maintain the vast barrier of Russia, the Near East, India, and China between Germany and Japan, until such time as the tremendous resources of the United States could be mobilized. The lifelines from the two Anglo-Saxon sea powers to this central barrier ran almost entirely through the western Indian Ocean.

The Japanese strategists were certainly not blind to all this. But for them to concentrate all their naval forces in the Indian Ocean in a supreme effort to cut the Allied lifelines through the western basin would have required more than mere insight. It would have forced them to break completely with all the foundations of their strategic planning; to abandon their idea of a circumspect "limited war" in favor of a reckless all-out effort. What the Japanese strategists did not realize was that they had no choice; that their cautious "independent" and "limited" strategy was radically unsound in a world-wide conflict and that the only slender chance of salvation depended precisely on such a seemingly reckless "unlimited" global strategy. The fatal effect of their plan for a "limited war" also prevented them from acting with full concentrated energy in any direction.

From the outset the Japanese strategists had been imbued with the vital necessity of preventing the Allies from developing Australia into a main basis for a counteroffensive. Simultaneously with their drives against Malaya and Java the Japanese drove in the direction of Australia and as early as January 23 captured the strategic center of the Bismarck Archipelago, the port of Rabaul on New Britain Island. The main

drive, through New Guinea towards Port Moresby, began auspiciously but was stopped before the tremendous obstacle of the Owen Stanley mountains.

The chances of a success of far-reaching consequences were still great. Australia's defensive power at that moment was almost nonexistent. If the Japanese commanders at this moment had been willing to depart from their methodical strategy of moving forward step by step, they might have by-passed New Guinea under cover of their carrier air forces and captured Port Moresby, the strategical center of the Australian defense, garrisoned only by a single brigade of raw militia.

At the beginning of May the Japanese decided to launch an amphibious attack against Port Moresby and sent a convoy around the Papuan Peninsula to land troops near the Australian base. The convoy was intercepted and turned to Rabaul with the loss of the carrier *Hosho* by an American task force in a series of actions known as the "Battle of the Coral Sea" (May 4 to 8).

At this point the reactions of the Japanese strategists are most difficult to understand and the cramping influence of their insistence on a "limited war" is most strikingly evident. For their drive to the southeast to isolate and neutralize Australia was not like their advance into the Indian Ocean, a move ending to lead them away from their fundamental objectives and therefore readily abandoned at the first evidence of resistance. It was an integral, in fact, *the* most important, part of their original program and its temporary arrest was a most painful blow. Yet, instead of responding to it with a concentration of their forces in overwhelming strength, we find them in the month after the defeat of the Coral Sea giving up this line for the time being, and instead dispersing their attention and their forces in several directions, as widely divergent as possible—attacks by special submarine groups against the British forces at Madagascar and in the harbor of Sydney, and by large expeditionary forces against the Aleutians and against Midway. At Midway, Japan lost the backbone of her carrier force at one blow.

THE disasters in the Coral Sea and at Midway disrupted the original plans of the Japanese command and threw it into one of those peculiar states of torpor and indecision first noted in the Japanese by Sir Ian Hamilton, a British military observer with the Japanese during the Russo-Japanese War. Although Coral Sea and Midway had shaken the Japanese power of offense, it was by no means broken.

In little more than three months after the defeat of their first attempt to obtain control of the Coral Sea area, the Japanese command in Rabaul was ready to resume its two-pronged drive

through New Guinea and through the Solomons. As before, the attack overland through New Guinea preceded the drive through the Solomons. On July 21-22 a Japanese force disembarked at Gona in Papua which the Allies had been unable to hold. The force captured the only airstrip in the region at Kokoda, badly mauled an Australian brigade sent to recover the field and finally broke through into the hilly country south of the central mountains and penetrated to within thirty miles of Port Moresby. The three thousand surviving Japanese soldiers, exhausted, diseased, and starving, were in no position to carry on the attack. The repulse of another seaborne expedition sent to establish itself on the extreme southeast tip of New Guinea at Milne Bay left the survivors of the overland march in an even more hopeless position and at the end of September this force broke and fell back across the mountains, practically dissolving itself in the retreat.

MEANWHILE preparations for the second Japanese drive down the Solomon chain towards the New Hebrides and beyond proceeded leisurely. Before, however, the airfield on Guadalcanal could be completed, the Allied high command, exploiting the Japanese dawdling, landed on the island. After the shock of the surprise was over the Japanese command had the choice of either abandoning Guadalcanal and with it their plan to control the Coral Sea area, or else take up the gauntlet at the risk of weakening their attack in New Guinea. They decided in favor of the latter and one brigade and one regiment were immediately thrown into Guadalcanal and further reinforcements and supplies sent down in a steady stream by transports, destroyers, carriers and barges.

Notwithstanding all their efforts, the Japanese were unable to dislodge or overwhelm the Marines on Guadalcanal and their drive broke down in October. Although they succeeded during the first two months in inflicting heavier naval losses on the Allies than they themselves suffered, their constant preoccupation with the necessity of waging the war "economically" prevented them from crushing the Allied naval forces early in the struggle when they had the strength to do so. By late October when they had decided to make a decisive effort, American command and strategy had changed from a cautious defensive to an aggressive offensive and the Japanese met with a severe rebuff costing them two battleships and a number of minor craft and a large number of troops.

Now thoroughly alarmed at the prospect of losing their hold on Guadalcanal, Imperial Japanese Headquarters transferred the Eighth Area Army to Rabaul and entrusted its commander with the task of retaking Guadalcanal. Mean-

while unexpected Allied successes in New Guinea convinced Imperial Headquarters that even the added support would not permit them to recover the initiative and maintain two simultaneous drives. The plan for the reinforcement of Guadalcanal was cancelled and the evacuation of the island was ordered. Defensive positions in the Munda-Kolombangara area were established. The battle for Guadalcanal came to an end and so did the attack against New Guinea.

The simultaneous defeat of the two drives for the control of the Coral Sea area brought Japanese strategy to a turning point. The first phase, the isolation and occupation of the "objective," Southeast Asia, had been achieved. Attempts to eliminate or neutralize bases beyond that had not been uniformly successful. Australia had not been neutralized. Still the Japanese strategists had good reasons for hoping to bring off the second, even more difficult, part of their plan—the wearing out of the Allies until they would finally give up the fight and accept the *fait accompli*.

In every direction, except against the Soviet Union, the Japanese had surrounded their central area with a broad buffer zone in which to exhaust and seal off counterattacks. Altogether the Japanese had erected what they hoped was a bastion around the central area of their empire. Behind this closely interlocking defensive ring the central reserve of the battle fleet would stand ready to deal a crushing blow to any Allied force that might succeed in piercing the outer ring.

FROM the beginning of 1943, the Japanese strategists regrouped their forces in opposite directions. With the end of the offensive phase the heavy units, battleships, carriers, and heavy cruisers, were withdrawn out of the danger zones. Conversely, the land and air forces, designed to absorb the initial shock of the Allied attacks, were pushed forward into the critical areas. In New Guinea the slow and costly progress of the Allied counter-drive against the remnants of the Japanese force that had menaced Port Moresby from the Gona-Buna area, captured in January, 1943, seemed to hold out to the Japanese strategists unexpected opportunities for a large-scale campaign of attrition. They promptly set to work to develop systematically the up-to-then comparatively weak positions along the northern coast and to pour in troops. The result of their plans was the destruction of their main convoy and some thirty thousand men by the Allied planes in the Battle of the Bismarck Sea on March 3, 1943. The bitter struggle for the Central and Northern Solomons still seemed to conform to the pattern of strategy which the Japanese

military leaders had set forth for themselves. Thus up to November 1943, the Japanese military leaders could still lull themselves into the belief that the plan of wearing down the Allies in a prolonged war of attrition was not working too badly.

THAT pleasant illusion was abruptly shattered by the great American offensive in the Central Pacific in the winter of 1943. Admiral Spruance's new Fifth Fleet was more than a match for anything the Japanese could throw against him, while the unprecedented concentration of aircraft carriers gave him a weapon with which to smash his way through the chain of defensive positions which the Japanese strategists had deemed unbreakable. He could overcome such positions under the cover of complete aerial superiority and of naval bombardments of unheard-of intensity. Finally from the new bases thus acquired he could isolate and neutralize other Japanese positions and leave them to rot. And, thanks to the revolutionary system of mobile supply bases simultaneously organized during his first strikes, Adm Spruance was able to overcome logistical difficulties that up till then had appeared insuperable and upon which the Japanese strategists had heavily counted.

So revolutionary was this wholly novel form of superior sea power that the Japanese strategists were unable immediately to grasp its significance and implications. So little did they realize what had happened, that they failed to perceive that the capture of the Gilbert Islands inaugurated an entirely new line of attack. Even the incomparably less costly capture of Kwajalein in the Marshalls was not enough to arouse them to the realities of the situation. It was only when Adm Spruance struck with telling force at their great naval base at Truk, that they awoke to the fact that their entire war plan had irretrievably been shattered in the course of exactly three months—from mid-November 1943 to mid-February 1944.

The fall of the key Japanese positions in the Gilbert and Marshall Islands meant more than merely the breakdown of the outer zone of defenses. It meant the collapse of their entire strategic system. Thus the failure of the advanced forces fatally compromised the power of intervention of the actual reserve as well. For without the shock-absorbing effect of the advanced forces the Japanese main fleet was not strong enough to oppose Spruance with any prospect of success.

Thus the Japanese strategists had virtually, if not yet *do facto*, lost the "command" of the western Pacific, which they had gained at Pearl Harbor and Kuantan. Without having had the opportunity to strike a single blow the Japanese fleet had been reduced to a mere "fleet in being."

still able to exert some restricting influence, but beset with all the perplexities of such a fleet. Whichever way the Japanese strategists turned, they were facing disaster. If they decided to risk their main fleet in trying to stop Adm Spruance, the probability was that they would be defeated outright. If, on the contrary, they continued to keep their fleet "in being" they would be unable to prevent him from rolling up their positions one after the other and would in the end find themselves forced to oppose him under even more unfavorable conditions.

Faced with this dilemma the Japanese strategists were unable to make up their minds either way and tried to wriggle through. Twice in succession, at the American approach to the Marianas and again before Leyte, they did throw in their main fleet in a desperate attempt to stop the Americans, but each time they attacked with so divided a mind, so unwilling even at this stage to all-out commitment, that they wasted their best forces to no purpose. What they saved was ignominiously destroyed in the great carrier strikes of March and July of the following year.

The failure of the Japanese main fleet to stop the American offensive in the Central Pacific marked the end of the second defensive phase of the Japanese Command's original strategy,

just as their withdrawal from Guadalcanal had meant the end of the first offensive phase.

As the American offensive advanced from the periphery toward the broad land masses of Japan's basic area—the Philippines, Formosa, and the Japanese isles proper—it ran into areas which could no longer be as easily isolated and in which the Japanese were able to concentrate and maneuver large masses of land and air forces. If the Japanese could utilize these advantages to slow down the American offensive they might still be able to make it so costly as to obtain something better than unconditional surrender.

Thus the conflict went on for another year. Strategy in the sense of a clear and reasoned plan finally came to an end when the hope of arresting the American offensive by concentrated masses of land forces and planes broke down in the long, hard and brilliant campaign for the Philippines. Dogged fanaticism and sheer despair still kept the Japanese strategists struggling on, although the end could no longer be in doubt.

They had embarked upon a struggle for which they had not the strength, and had concealed this from themselves by trying to make it into something which by the nature of the circumstances it could not be—a "limited war." ★

Enemy Equipment Intelligence

By Col Paul N. Gillon, USA

THE RAPID RATE at which new weapons were developed during the war, as well as the great disadvantage under which we entered it, made acquisition of technical intelligence of the enemy's combat materiel, especially in the field of ordnance, vitally urgent. Steps were therefore taken very early in the war to secure, train, and place in the field, officers and enlisted men specifically charged with securing all possible technical intelligence on enemy ordnance. As the need arose, technical services other than ordnance organized similar groups and placed them in the field. The activities of these groups gained important information, and with their growth and augmentation it became increasingly apparent that the integration of all such activities was highly desirable. Accordingly, early in 1944, the Army Service Forces Enemy Equipment Intelligence Service Teams were initiated by General Somervell, then Chief of Army Service Forces. All technical services of the army were represented. The difficulties encountered were great, because there was no precedent for such an organization.

The team as eventually organized provided for 14 officers and 22 enlisted men. Personnel was assigned from the following technical services: Ordnance, Signal Corps, Chemical Warfare Service, Engineer Corps, Quartermaster Corps, and Medical Corps.

The mission of ASFEEIST was the acquisition, examination, and disposition of captured enemy materiel and related data. Its work made it possible to provide accurate and prompt knowledge of new developments or new techniques in the use of enemy equipment to the various research, development, and design agencies within the technical services of the War Department, as well as the appropriate staff agencies in both theaters of operation and the zone of the interior.

The Leyte campaign was the first sizable Pacific operation in which the team participated. This operation provided the basis for the planning which was done for the subsequent Iwo Jima and Okinawa operations.

The final campaign of ASFEEIST was the Okinawa operation, where sizable quantities of materiel were recovered for shipment. One of the most significant contributions of the organi-

zation on Okinawa was its conduct of field tests on Japanese demolition materiel and the Japanese 47mm anti-tank gun.

The primary function of ASFEEIST involved the collection and dissemination, not only of Japanese equipment, but also of information regarding such equipment. However, contributions made by ASFEEIST to the training program of American troops should not be overlooked. Many reports for this phase were written in the field very close to the point of capture of the materiel. Also, numerous items captured in forward areas were returned to the interested services in the United States for analysis in the army's laboratories. Wherever two or more items were found, one was shipped to the mainland and one retained for analysis by ASFEEIST personnel. Further work, such as metallurgical examination, was carried out in the great laboratories of America's universities.

The two functions of analysis of materiel and the training of troops concerning the materiel are complimentary and consequently, as the war progressed, the activities of ASFEEIST relative to the training phase increased considerably. All items of equipment not urgently needed for technical examination were utilized first for training within the theater and second for training purposes within the United States. The

training of troops within the theater relative to enemy equipment extended to most of the important types of equipment which the combat soldier was likely to encounter.

As an example of important inferences with regard to decreasing Japanese resources that were drawn from items investigated by ASFEEIST, it was found that textiles on Okinawa had been adulterated with hemp, that steel was being substituted for brass in cartridge cases, and that buckles on newly issued field bags were cloth-covered bamboo.

The lessons learned in the Pacific as a result of the work of the ASFEEIST played an important part in the development of materiel by the technical services in the United States Army. By the progress of analyzing every new item of enemy equipment the trends in the development of enemy materiel were deduced.

It is not sufficient, however, merely to make tests of enemy materiel to determine such obviously important knowledge as the range of his ammunition, the light intensity of his flares, the comfort of his field uniforms, or the effectiveness of his medicines. What is absolutely essential for the appraisal of the captured item is that it be minutely scrutinized by all appropriate scientific facilities available for the job. ★

AGF Cold Weather Tests

IT IS GOING to be a literally "cold winter" next winter for some 4,500 Army Ground Forces troops of three separate task forces as final plans for testing Army Ground Forces equipment under all winter conditions near completion.

These task forces will test all types of AGF equipment, including tanks, self-propelled guns, radars, special snow vehicles, new rations, kitchens, clothing, and other items.

To determine whether existing equipment will function and what new equipment is required for ground forces to fight under all winter conditions, certain items of equipment used in winter combat in the European Theater of World War II having proved unsatisfactory, task forces "Frigid," "Frost," and "Williwaw" will leave soon for Fairbanks, Alaska; Camp McCoy, Wisconsin; and Adak, Alaska, respectively.

From 1 October 1946 until 30 April 1947, the task forces will operate in all types of dry cold and wet cold weather to ascertain the suitability of present equipment and new types of equip-

ment to meet all possible winter combat conditions. At the same time they will study the need for changes in existing tactical doctrines and training methods for winter operations.

Personnel for the three task forces will be drawn from units of the Ground Forces throughout the United States, with volunteers being given preference in assignment.

Each task force will be commanded by a specially selected officer. Troops from all ground arms are being included in each task force. Experts on the equipment to be tested will be part of each force.

In keeping with its policy of perfecting in peace the equipment it may need in combat, Army Ground Forces planners chose the Fairbanks site for task force "Frigid" in order to subject equipment to extremes of prolonged arctic cold.

Temperatures at Fairbanks as low as 66 degrees below zero have been recorded. Daily average minimum temperatures of -16, -20, and -17 degrees can be expected in December, January, and February, respectively, with daily average maximum temperatures of zero for these months.

Accumulated snowfall up to five feet on the level can be expected by the latter part of the winter. Blizzards occur during all of the winter months.

While not anticipating the extremes in sub-zero temperatures to be found in Fairbanks, task force "Williwaw" will function under almost constant rain and fog and daily freezing and thawing. It will be subjected to the sudden freakish storms occurring in the Aleutians known as "williwaws". These storms generate with great suddenness, have terrific winds carrying snow, sleet, and rain, and are described as blowing in all directions at once. Wind velocities of 110 miles per hour have been recorded.

Adak, an island in the Aleutian chain, averages six inches or more of rainfall per month from October through April with precipitation expected two out of every three days.

Camp McCoy, located 95 miles northwest of

Madison and eight miles from Sparta, Wisconsin, will be the scene of tests for equipment under heavy temperature climate winter condition. Weather possibilities at Camp McCoy are those which can be anticipated in the northern zones during the winter months and are similar to those experienced by the American armies during the Ardennes offensive.

Temperatures for task force "Frost" at Camp McCoy will range between zero and freezing during three months, with occasional lows well below zero. Eighteen inches to two feet of accumulated snowfall can be expected by February.

These tests will be observed by experts from the US Ground Forces, Air Forces, Navy, and Marines.

Task force "Frigid" and "Williwaw" will assemble early this summer at Fort Ord, California for special training and equipping and then go to Alaska in September. Task force "Frost" will assemble in July at Camp McCoy. ★

The American Infantry-Armor Team

By MajGen John W. O'Daniel, USA

INFANTRY and armor finished this war with an ability to cooperate which was almost unbelievable to those who had opportunity to see how deficient they were in this respect in the early stages of the war.

That deficiency, which characterized the non-armored infantry divisions and the independent armored battalions, was due primarily to a lack of material for proper combined training of the two arms. It did exist, however, and caused us losses. Tunisia for instance, still furnishes sad and bitter memories to many.

In studying the factors affecting future training at The Infantry School, a most encouraging one stands out prominently in the experience reports available. That factor is the amazing mental flexibility of the American soldier and the speed and relative ease with which he was able to abandon any preconceived ideas he might have had and adopt new ones to fit the situation at hand.

He fought each battle as he came to it. When the methods he had been taught failed to work he experimented. When his experiments were successful he adopted them as tentative SOP. He unhesitatingly discarded those experiments which didn't work, and just as unhesitatingly modified those which would work when new conditions made them of doubtful value.

When an army of seven million men is built around a nucleus of less than 200,000, it is obvious that the small unit leadership is going to be in the hands of those who are not highly

educated from a military point of view and who have few, if any, fixed ideas.

These men depended upon fundamentals, faced the issue as it existed, and made their decisions on the basis of cold fact, leavened with imagination and their compelling desire to save the lives of those who trusted and followed them. This freshness of viewpoint was tempered and kept within the bounds of military soundness by experienced supervision.

When our armor began to see action in North Africa in late 1942 and early 1943, there were widely divergent opinions regarding its capabilities and the proper methods of using it. The German successes in Europe and North Africa had led many to feel that the tank had become "king" of the battlefield, and the doughboy was relegated to semi-service duties of cleaning up and holding.

We paid heavily in lives and in material to learn that armor, like every other arm, is not sufficient unto itself but must work with other arms, not only for its own security but to achieve maximum results from combat.

Beginning in North Africa and continuing through Sicily, Italy, Europe, and the islands of the Pacific, we began to appreciate some of the problems presented by the ever-increasing closeness of the wedding of infantry and armor, and we began to solve those problems on the spur of the moment—and, more often than not, to solve them successfully.

None of those problems is yet completely

solved. However, real progress has been made on many of them, and on others sufficient progress has been made to know that the problem exists, which is always a step forward.

The basic problem was the need for mutual understanding and confidence of infantry and armor, which are the real comrades of the battlefield. They must meet the enemy face to face and work together to destroy him.

One of the early errors that led to misunderstanding was commented on in a report from the 7th Armored Group in Europe during late September 1944. The comment told of the failure of infantry commanders to include in their staff conferences and in planning, the commanders of the attached tank units. The result, according to the report, was the assignment of unsuitable tasks to the tanks, and the loss of mutual confidence.

The infantryman's feeling of responsibility for protection of his accompanying armor increased by leaps and bounds. This was probably due to the somewhat selfish knowledge that if he lost one of his tanks he lost a powerful battlefield aid. Whatever the cause, this protection was SOP in all theaters within a short time after the first joint fighting of the two arms.

A second major problem, closely related to that of mutual confidence, was that of communications. Within a few days of the landing in Normandy, it was general practice to fasten to the outside of a tank a telephone hooked into the tank's inter-communication system. This practice in various forms was continued until the end of the campaign and was also used in the Pacific. Other communication expedients adopted were: the 116th Infantry furnished the tanks with SCR 300 radios which were kept tuned in to the infantry battalion channel; the 761st Tank Battalion sent a liaison officer in a half-track equipped with an SCR 508 radio to infantry regimental headquarters; in the 16th Infantry when the tanks were moving ahead of the infantry, one tank was held back to permit the infantry commander to communicate with the tanks and when the two were together the infantry company commander would ride in the tank with the tank platoon leader; units of the Sixth Army in the Pacific used sound powered telephones in their tanks with about 50 feet of wire run out

through the turret ventilator or the pistol port; the 330th Infantry installed SCR 536 radios in their tanks, removing a bolt and running the antenna, previously insulated, through the hole thus made.

Some of the most astonishing variations were observed in the proportions of the two arms allotted for the accomplishment of various missions.

The allotment of tanks to infantry varied from as much as battalion for battalion in some stiff fighting in Europe to the allotment of single tanks to infantry companies in the Pacific.

The tankers did not hesitate to abandon their theories of mass use of tanks where the situation required.

We, who bear the responsibility for the training of our basic fighting team of the future—infantry, armor, artillery, and air—must do certain things.

Our training must keep abreast of new ideas.

We must study those ideas from every angle and try them in every way until we know what the effect will be—how best we can exploit their use.

We must foster and encourage in every possible way the spirit of comradeship and mutual confidence between these arms. To this end peacetime dispositions and training plans should insure that infantry tanks and armored reconnaissance units (and of course the always indispensable artillery) train together.

It is not the job of the infantryman or the tanker to worry yet about the effect of the atomic bomb on any future warfare, or about any of the other things that are hailed as presaging a revolution in combat methods. We must, rather, take our stand on the firm foundation that the infantry-tank team, reinforced by the powerful assistance of air and artillery, is the most potent fighting combination that ground combat has yet known.

Our job is to increase the power of this combination to the limit.

Above all, we must encourage and develop that quality in the American soldier which is a part of and peculiar to our way of life, the independent and challenging spirit which accepts nothing as final but always poses the question "Is there a better way to do it?" ★

THE United States Army Ordnance Department recently summarized its contribution to the war effort. Starting with only 14 officers during the War of 1812, the department has grown through six wars to the tremendous force of World War II with 25,000 officers, 350,000 enlisted men and 250,000 civilians. The Ordnance Department procured 38,000,000,000 dollars worth of equipment during the war for the United States and 40 Allied Nations. Among equipment obtained were: 43,000,000,000 rounds of rifle and machine gun ammunition; 1,000,000,000 artillery projectiles; more than 17,000,000 rifles and pistols; nearly 3,000,000 machine guns; approximately 600,000 artillery weapons; and 3,500,000 vehicles including 100,000 tanks.



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Know Your Marine Corps

By Sgt Lawrence M. Ashman

WHAT is the Marine Corps organization? What is a Marine Division composed of? What is meant by a triangular division? These and many more are the questions asked by present day marines. These same questions will be asked by men who are to be our future Leathernecks. Why are so few men of the Corps, enlisted and officer alike, so ill-acquainted with the very organization in which they eat, work, and sleep? They haven't the faintest concept of who or what makes up the Corps.

After five minutes conversation with both veteran and neophyte it becomes strongly apparent that they don't know what the word "organization" means.

Until now Marine Corps organization has been restricted to those associated with the intelligence and transport loading arteries of Marine units, and the few men who are willing to spend their leisure hours in concentration over books and Tables of Organization are soon discouraged by technical ties.

For better understanding and harmony, even if only within the company, it is essential that this timely information be placed within easy reach of all. The "old-timers" should be kept abreast of the many changes, not necessarily detailed, but over-all changes which are constantly occurring.

Reserve the technicalities for the officers, staff grades, and intelligence personnel but put the dope on the table for the men of the lower pay grades. The extended use of training aids would facilitate instruction. Such expedients as attractive and informative bulletins or pamphlets distributed weekly or monthly and written in a breezy, interesting manner will keep the men on the alert for changes.

Require at least two to five hours instruction in "boot" camp. After the men have completed their initial training and have joined a more static unit, carry out the remainder of the theme by informing them of the organizational characteristics of the unit of which they are now a part, even if the dissemination is borne out via mimeographed literature and informal talks. If the unit which our neophyte has joined contains a "two" section, let it be the function of this section to distribute information relative to the unit concerned.

If the pamphlets and bulletins are made attractive and also make full use of everyday Marine jargon, more will be accomplished. Give these informative leaflets a brand and priority so that they will be recognized immediately when each successive publication adorns the various company bulletin boards.

Simplification of the technicalities of organization can be accomplished and presented in a nonbaffling manner. Informing the men of the organizational tables does not mean that you will be required to delve into exigent order of battle prescriptions; that phase is an essential function of intelligence and rightly so.

Not only is it necessary to keep all members of the active Marine Corps informed, it is also necessary to keep men who are on inactive duty up-to-date in their conception of Marine Corps organization.

The men not only want to know increasingly more as the Corps grows older, but they will of necessity need to know more. They need the knowledge, they are ready for it, and it is the duty of the officers and NCOs to present it to them.